

ENTREPRENEURS AND SMALL BUSINESS— KENTUCKY'S NEGLECTED NATURAL RESOURCE

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Preface

This report was prepared as part of the Kentucky Long-Term Policy Research Center's mission to serve as a catalyst to change the way decisions are made in government by providing policymakers a broader context in which to make decisions, taking into consideration the long-term implications of policy, critical trends, and emerging issues which may have a significant impact on the state. Here we focus on the potential benefits of cultivating and advancing entrepreneurship and small business development as economic development tools, the present status of the Commonwealth's entrepreneurial capacity, trends likely to influence entrepreneurship in the coming years, and ways of leveraging a more entrepreneurial culture. This report should be of interest to anyone interested in the development of Kentucky's full economic potential.

Please note that the Cabinet for Economic Development has expressed concerns about the findings of this report. The Cabinet's complete comments appear as Appendix H.

KENTUCKY LONG-TERM POLICY RESEARCH CENTER

The Kentucky Long-Term Policy Research Center was created by the General Assembly in 1992 to bring a broader context to the decisionmaking process. The Center's mission is to illuminate the long-range implications of current policies, emerging issues, and trends influencing the Commonwealth's future. The Center has a responsibility to identify and study issues of long-term significance to the Commonwealth and to serve as a mechanism for coordinating resources and groups to focus on long-term planning.

Governing the Kentucky Long-Term Policy Research Center is a 21-member board of directors that includes four appointees from the executive branch, six from the legislative branch, and 11 at-large members representing citizen groups, universities, local governments, and the private sector. From the at-large component of the board, six members are appointed by the Governor and five by the Legislative Research Commission. In accordance with its authorizing legislation, the Center is attached to the legislative branch of Kentucky state government. The makeup of its board, however, affords it functional independence and permits it to serve both the executive and legislative branches of government equally, as well as the public.

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Table of Contents

Preface	v
Figures	xi
Tables.....	xiii
Maps	xv
Summary	xvii
Glossary	xxxi
Acknowledgments	xxxiii
Introduction	1
Data and Methodology	2
Study Outline	3
Why Entrepreneurship?.....	5
The Business of Kentucky Is Small Business.....	6
New Labor Market Realities	8
Entrepreneurial Benefits.....	10
High-Value Jobs.....	10
Greater Equity	13
Innovation.....	14
Economic Diversity	16
Wealth Creation	16
Radiating Economic and Social Entrepreneurship	17
New Directions for Development Policy	19
Conclusion.....	22
Who Are Kentucky's Entrepreneurs?	23
A Regional Profile.....	24
Hot Spots for New Firms	24
A Demographic Profile.....	27
Gender	27
Education	28
Income	29
Race	30
The Entrepreneurial Motivation	31
Gaining Wealth and Independence.....	31
Role Models	32
Business Experience	33
The Value of Longevity	33

Practice Makes Perfect.....	33
Conclusion.....	34
Taking Kentucky's Entrepreneurial Pulse.....	35
Report Cards.....	37
Corporation for Enterprise Development	37
Survey of Small Business Owners in Kentucky	37
Inputs--The Raw Materials of Entrepreneurship	39
A Supportive Culture	39
Demographic Diversity	41
Education and Intellectual Capital	43
Management and Support Talent	44
Financial Capital	46
How much capital does it take to start a business?	46
Where does start-up capital come from?	46
Is there enough capital available for Kentucky's entrepreneurs?	47
Why do entrepreneurs experience problems obtaining capital?	53
How will bank consolidation affect capital availability?	55
Vision Beyond One's Borders	58
Technology That Meets Market Needs	61
Abundant Social Capital	63
Public Sector Support.....	64
Outcomes--Entrepreneurial Products.....	70
Income	70
Seedlings.....	70
Initial Public Offerings	72
<i>Inc.</i> 500 Companies.....	74
Conclusion.....	76
Trends Influencing Entrepreneurial Development	77
"The Future That Has Already Happened"	77
Doing Business on the World Wide Web	80
Who's Using The Web?	81
Web Site Benefits.....	83
Web Site Development.....	84
Web Site Costs.....	85
Conclusion.....	85
A Rising Commitment to Microenterprises	87
Out of the Third World	88
The U.S. Response.....	90

The Seeds of Microenterprise Development in Kentucky.....	91
Conclusion.....	94
New Possibilities.....	95
Strategies for Change.....	97
Nurture and Cultivate an Entrepreneurial Culture.....	98
Strengthen Support for Entrepreneurs and Small Business.....	100
Focus Efforts at the Local Level.....	103
Exploit the Vast Potential of the Internet.....	103
Build Assets.....	104
Address Inequities.....	104
Conclusion.....	105
Conclusion.....	107
Appendix A.....	111
Appendix B.....	135
Appendix C.....	145
Appendix D.....	147
Appendix E.....	163
Appendix F.....	165
Appendix G.....	167
Appendix H.....	171
References.....	175

Figures

Figure 1: Business Establishments in Kentucky, 1995	7
Figure 2: Distribution of Employees in Kentucky by Size of Business Establishment, 1995	7
Figure 3: Average Payroll of Kentucky Firms, by Size of Firm, 1995	11
Figure 4: Regional Distribution of Real and Latent Entrepreneurism in Kentucky	25
Figure 5: Real and Latent Entrepreneurism in Kentucky by Gender	27
Figure 6: A Comparison of Educational Attainment Between Kentucky's Entrepreneurs and the General Population	28
Figure 7: A Comparison of Household Income for Kentucky Entrepreneurs and the General Population	29
Figure 8: Entrepreneurship in Kentucky, by Race	30
Figure 9: What motivated you to start your own business?	31
Figure 10: Percent of Respondents with a Close Relative Who Has Owned a Business	32
Figure 11: Did any of the following close relatives ever operate their own business?	32
Figure 12: In general, how much experience does the principal owner have in this type of business?	33
Figure 13: How many other businesses have you started?	33
Figure 14: Have you ever started a business or seriously considered starting a business?	40
Figure 15: Do you think Kentucky offers a friendly environment to entrepreneurs who want to start a business?	40
Figure 16: Inc. 500 Employees by State	45
Figure 17: How much capital does it take to start a business?	46
Figure 18: Did you obtain money from these sources when you were starting your business?	47
Figure 19: What was the most significant obstacle to launching this business?	48
Figure 20: Is there a shortage of capital or entrepreneurs in Kentucky?	49
Figure 21: Number of Small Business Loans for \$100,000 or Less	50
Figure 22: Would you be willing to invest in a Kentucky-based business?	51
Figure 23: Obstacles to Lending to Small Businesses and Entrepreneurs Cited by Kentucky Banks	53
Figure 24: Kentucky Banking Institutions, 1982-2005	55
Figure 25: Predicted Average Hourly Wages of Professional, Production and Other Workers, by Type of Business	58
Figure 26: Where do you send entrepreneurs for help with developing their business plans or their businesses?	65
Figure 27: In preparing to start this business, did you receive help from any of the following sources?	66
Figure 28: The Role of State Government in Business Start-Ups	66

Figure 29: An Assessment of Government Responsiveness to the Needs of Entrepreneurs by Familiarity with Various Support Programs	67
Figure 30: U.S. Self-Employed Workers, 1963-2005	71
Figure 31: Self-Employed Workers, 1995	71
Figure 32: Initial Public Offerings, Kentucky and Selected States, Total and Per Million Urban Population, 1993-1995	73
Figure 33: <i>Inc.</i> 500 Firms, Kentucky and Selected Surrounding States, 1982-1995	75
Figure 34: Estimated Number of Businesses with Web Sites, Kentucky and Surrounding States	80
Figure 35: Having a Web site has helped our business increase sales	83
Figure 36: Web Site Development Costs	84
Figure 37: If state government could do one thing to help small businesses get started in Kentucky, what would it be?	100
Figure 38: How would you assess the quality of recent applications for start-up loans compared to five years ago?	101
Figure 39: If state government could do one thing to help small businesses like yours succeed, what would it be?	102

Tables

Table 1: U.S. Job Growth by Sector, Firm Size, 1991-1996.....	6
Table 2: Kentucky Job Growth by Major Industry and Employment Size of Firm, 1992-1996.....	7
Table 3: Projected Job Losses in Occupations with Highest Losses, Kentucky, 1994- 2005.....	8
Table 4: The Fastest Growing Occupations in Kentucky by Job Requirement, 1994- 2005.....	9
Table 5: Kentucky Establishments by Industry Group, 1995	11
Table 6: Annual Pay Per Employee by Establishment Size and Industry, Kentucky, 1995.....	12
Table 7: Kentucky Counties with the Highest Growth Rate of Firm Formation, 1990 to 1995	24
Table 8: What was the principal owner's estimated total household income when he or she started this business?	29
Table 9: Small Business Owners' Assessment of Factors Affecting Small Business Success in Kentucky	38
Table 10: Regional Venture Capital Sources, 1997	51
Table 11: Surrounding State Venture Capitalists and Kentucky Firms.....	52
Table 12: The Importance of Various Factors to Kentucky Banks When Making a Lending Decision.....	53
Table 13: Do you believe the process of acquiring financing for your business was overly difficult or appropriately demanding?.....	54
Table 14: Small Business Loans and Dollars from Kentucky Banks, by Size of Assets.....	56
Table 15: Familiarity of Kentucky Businesses with the Economic Development Cabinet and the Small Business Administration.....	60
Table 16: Information Technology Use by Kentucky's Small Businesses	61
Table 17: How Kentucky's Small Businesses Use the World Wide Web	61
Table 18: Has your institution (bank) worked in collaboration with any of the following funding sources to put together financing packages for small businesses or start-ups?	65
Table 19: How familiar are you with the programs and services to small business provided by these organizations and agencies?.....	67
Table 20: Goods and Services Sold by Kentucky's Web Businesses.....	82
Table E.1 Regions of Kentucky by County.....	163
Table F.1 Regression Model Estimates for Professional, Production and Other Wages.....	165
Table F.2 Probit Model Estimates for the Difficulty of Acquiring Financing.....	166
Table G.1 Economic Performance Index, Kentucky and Surrounding States Ranking, 1990-1996.....	167
Table G.2 Kentucky's Economic Performance Index and Rank Among States, 1996	167

Table G.3 Business Vitality Index, Kentucky and Surrounding States Ranking, 1990-1996 168

Table G.4 Business Vitality Index and Rank Among States, 1996 168

Table G.5 Development Capacity Index, Kentucky and Surrounding States Ranking, 1990-1996..... 169

Table G.6 Development Capacity Index and Rank Among States, 1996 169

Maps

Map 1: Firm Growth, 1990-1995, by County	26
Map 2: Kentucky Businesses with Web Sites	82
Map E.1 Kentucky Regions.....	163

Summary

While we have made much progress, development of the Commonwealth continues to be frustrated by high rates of poverty, low wages and an historically poor educational status. In this report, we argue that our economic development efforts must place a far stronger emphasis on building from within. Specifically, they must bring attention to entrepreneurship and small business development equal to that being brought to industrial recruitment strategies. Rather than being the work of a state government agency, cultivating entrepreneurship and support for small business will require the contributions of governments, institutions and citizens across the Commonwealth. Through these efforts, we can increase wealth and give our young people reason to stay in—or perhaps return to—Kentucky.

This report brings new information to an expanding dialogue about entrepreneurship. It includes the results of surveys of the general population, small business owners, bankers, venture capitalists in surrounding states and businesses with a presence on the World Wide Web.

Why Entrepreneurship?

Changes in our economy and our society are redefining how we live and work, build successful enterprises, and create economic opportunity. To ensure the economic well-being of citizens, government must adapt to these changes. Successful adaptation will depend on many factors, but entrepreneurial energy is key. In this report, we argue that the entrepreneurial path is the right one for the state's development efforts to follow. The most explosive employment growth is occurring among small businesses, and more jobs are being created by industries dominated by small firms. Further, entrepreneurship offers substantial returns on investment. To garner these benefits, however, development policies must accommodate a new focus, one that places equal emphasis on entrepreneurship and small business development.

The Business of Kentucky Is Small Business

A highly diversified small business community has long been the backbone of the Kentucky economy. While the contributions of large firms are undeniable, these firms may be reaching the limit of their ability to spawn significant employment growth. Small enterprises, on the other hand, afford a virtual wellspring of potential growth. In Kentucky, firms with fewer than 500 employees created all of the *net* new jobs from 1992 to 1996 while businesses with fewer than 20 employees created 52.6 percent of the small business job growth or 67,744 jobs. Genuinely small businesses, those with fewer than 20 employees, represent 85.7 percent of all firms and employ 26 percent of Kentucky's workforce.

New Labor Market Realities

While the United States will continue to make increasingly sophisticated products and retain a commanding share of world production for the foreseeable future, technology and organizational change are expected to enable productivity leaps that will eliminate many manufacturing jobs. Between 1994 and 2005, the Bureau of Labor Statistics predicts that an estimated 1.3 million manufacturing jobs will be lost while the national share of output remains virtually unchanged. As a consequence, the very foundation of the development strategies on which we have historically relied is being systematically undermined. Employment growth is expected to remain concentrated in the service and retail industries, from high-end jobs for general managers and top executives to street-

level sales clerks. In response to the decentralization of jobs, many are creating their own opportunities in the marketplace.

Entrepreneurial Benefits

Entrepreneurial development holds the possibility of many potential short- and long-term benefits, including high-value jobs, greater equity, innovation, economic diversity, wealth generation, and radiating economic and social entrepreneurship.

High-Value Jobs. Today, small businesses are not only creating more jobs than larger firms, according to Cognetics, a Cambridge, Massachusetts, firm that tracks small business employment, they are creating more high-wage jobs. From 1991 to 1996, Cognetics found that firms with fewer than 100 employees created 9.3 million or 83.6 percent of the 11.2 million net new jobs. Of the jobs created, small firms created 4.2 million or 87 percent of the jobs in high-wage firms, paying an average wage of \$29,191. Today, the quality of jobs in small firms in Kentucky nearly parallels those being created by most established businesses; only the state's largest firms pay significantly higher wages on average. While the average wage at Kentucky firms employing fewer than five people was \$21,820, the average for all firms was only 2 percent higher at \$22,340. And as small firms stabilize, wages improve. Because small firms in Kentucky dominate every major industry group, the importance of strengthening small firms with high-wage potential and facilitating their growth cannot be overstated.

Greater Equity. A development strategy that offers opportunity to everyone, instead of linking it to the location decisions of outside firms, is far more likely to distribute its benefits equitably. An entrepreneurial approach to raising quality of life and personal income in Kentucky would channel public resources to communities and individuals who need them, rather than to mobile industries that pit states against one another in a bid for long-term tax relief. This deferral of public resources and the public good they might achieve over the long run compromises the state's ability to fashion its own remedies for unique economic and social problems.

Innovation. Research suggests that entrepreneurial firms have greater potential for innovation than large established ones. Entrepreneurial firms have the potential to create or capture an entire industry while large ones are often predisposed to protect market share. In a study conducted for the U.S. Small Business Administration, small firms were estimated to be responsible for 55 percent of more than 8,000 innovations in 362 industries identified in selected trade journals. New firms in particular were found to have made a significant contribution to the commercialization of new technologies. The study also found that small entrepreneurial firms produce more than twice as many product innovations per employee as their larger counterparts and nearly twice as many significant innovations per employee.

Economic Diversity. Small entrepreneurial firms tend to create diversity in competition while large firms tend to stifle these forces and link whole networks of businesses and industries to the production strategy and the economic health of a single enterprise. As a consequence, whole networks of businesses rise and fall with the fortunes of single firm. Witness the economic devastation of Kentucky communities that have lost thousands of garment manufacturing jobs. By contrast, diversity reduces the vulnerability of local economies to unforeseen events and helps moderate the effects of inevitable economic downturns.

Wealth Creation. While the wealth generated by a particular business is nearly impossible to measure, wealth generated by homegrown enterprises is clearly more likely to remain and be reinvested in a local economy. Not only do homegrown firms and their profits tend to stay in the communities where they originate, the returns on entrepreneurial investment are easier to gauge.

Radiating Economic and Social Entrepreneurship. One of the most desirable traits of entrepreneurs is their ability to generate excitement and inspire others to join their ranks whether they are launching a new business or tackling a social problem. Social or civic entrepreneurs who inspire commitment to common good have become as important to the well-being of our state and our nation as those who form new businesses. The presence of role models, many of whom serve as

mentors, provides powerful encouragement to others. In short, teaching the populace to think and act entrepreneurially promotes efficiency, creativity and innovation in arenas beyond the business world.

New Directions for Development Policy

In spite of changing employment patterns, a growing population of working poor, the poor quality jobs that incentive packages have netted, and mounting criticism of the cost of incentives, the lure of the big fish remains irresistible. Moreover, the long-term efforts needed to build a more entrepreneurial economy will not produce immediate, politically gratifying results. Over time, however, they will likely produce far more diversified and more resilient economies, a particularly important goal for an essentially rural state. An economy fueled by people with strong attachments to the Commonwealth will generate more enduring prosperity than one that relies too heavily upon locating industries that too often exploit our weaknesses.

While industrial recruitment can play a role in the development of Kentucky's economy, it should not be mistaken for the only one. Indeed, facilitating the growth and development of small businesses and enabling the emergence of entrepreneurs must assume equal importance in our economic policy framework. By relying too heavily on industrial recruitment today, we may place the very public goods small firms need—education, job training, infrastructure, and support services—at risk over the long term. In short, our “bird in the hand,” the small firms that are already the backbone of Kentucky's economy and the unrealized entrepreneurial potential of our state, deserve a commitment of resources and energy equal to that now being extended to outside firms.

Who Are Kentucky's Entrepreneurs?

From our base of information about Kentuckians who have launched enterprises, we can learn more about the entrepreneurial process, how it can be better supported, and how our approach to development can be modified to garner more positive outcomes. Our survey findings show that the “typical” Kentucky entrepreneur is a white male, around 45 years old, of above average education and income, has started more than one business, lives in the state's urban triangle, and comes from an entrepreneurial family. While this profile reflects the state's relative lack of diversity, it nevertheless points to the need for corrective policies that will enable more women and more minorities to participate in business ownership.

Regional Profile. Regionally, our survey findings also show a fairly even distribution of real and latent entrepreneurship in Kentucky, evidenced by responses to a survey conducted by the University of Kentucky Survey Research Center for the Kentucky Long-Term Policy Research Center. While more individuals who live in the state's urban triangle (23 percent) and in the south central region of the state (20 percent) report having started businesses, those who expressed interest in starting a business were fairly evenly distributed across regions. Consequently, this wellspring of entrepreneurial potential could produce positive benefits statewide if appropriate focus were brought to it.

Demographic Profile. In spite of a 39 percent increase in women-owned Kentucky firms between 1987 and 1992, most Kentucky entrepreneurs are men. Around 66 percent of adult Kentuckians who report having started a business are male and 77 percent of surveyed business owners reported that their principal owner was male. In comparison, Kentucky's 1990 population was approximately 48 percent male. We also found that nearly two thirds of women in Kentucky have neither started a business nor considered starting one, compared with just over a third of Kentucky's adult male population.

Kentucky entrepreneurs tend to have more education than the general population, a finding that correlates with other studies of small business owners. Around 40 percent of Kentucky's entrepreneurs have at least three to four years of college and about 30 percent have at least a bachelor's degree. By comparison, approximately 27 percent of adult respondents (over age 18) to the general population survey report having at least three to four years of college and around 21

percent report having at least a bachelor's degree. A high level of education is not, however, a prerequisite for entrepreneurship: almost 11 percent of Kentuckians who reported having started a business have no more than a high school diploma or a GED.

Kentucky's entrepreneurs also tend to have higher incomes than the typical Kentuckian. The portion of Kentucky households that have incomes greater than \$50,000 annually is about 28 percent. By comparison, an estimated 40 to 45 percent of Kentucky's "entrepreneurial households" have incomes of at least \$50,000 a year. However, Kentuckians have been able to launch small enterprises on relatively low incomes. For instance, almost 4 percent of the respondents to the small business owners' survey started their business when their household incomes were under \$5,000. While 13.8 percent of these small businesses were launched with \$5,000 or less and 22.7 percent were started with \$10,000 or less, the "typical" amount needed to launch a new small business is around \$40,000, not an insignificant amount.

Though the number of black-owned businesses in the United States increased 46 percent between 1987 and 1992, according to the Census Bureau, the growth was not as pronounced in Kentucky. The number of black-owned businesses increased 36.4 percent between 1987 and 1992, and the ownership rate (number of businesses per 1,000 black population) increased 30.7 percent.

The Entrepreneurial Motivation. The vast majority of small business owners we surveyed reported that they became entrepreneurs because they wanted to become their own boss and achieve economic success. And, significantly, almost 60 percent indicate that the example and the encouragement of others played an important role in motivating them to start a business. Nearly one third (30 percent) of these small business owners cited the example of others' success as a reason for starting their own business. About 63 percent of respondents have a close relative, most typically a parent, who has operated his or her own business. Experience also counts. A majority (52 percent) of these small business owners indicated that they had more than 10 years experience in their particular type of business.

Almost 40 percent of respondents to the Center's Survey of Small Business Owners also reported starting more than one business. While 43 percent reported starting one other business, nearly a fifth of respondents (18.5 percent) said they had started four or more other businesses. Having experienced an earlier venture apparently teaches the risks of running a company and fosters a better understanding of what it takes to construct organizations from scratch.

Taking Kentucky's Entrepreneurial Pulse

If entrepreneurship is to become an engine of growth for the Commonwealth, we must first identify our strengths and weaknesses, then build and minimize accordingly. A number of useful metrics taken in combination indicate entrepreneurial health, the latent potential of a people and a place for enterprise development. Here we look at two "report cards" on entrepreneurial capacity and examine recognized inputs or raw materials of entrepreneurship and the resultant outcomes or entrepreneurial products.

Report Cards

For the past 10 years, the Corporation for Enterprise Development (CFED) has provided an annual assessment of each state's economy and its potential for future growth based on more than 50 socioeconomic indicators. Importantly, CFED's assessment of Kentucky's business vitality moved from a "D" in 1995 to a first-ever "A" in 1996, largely on the strength of the diversity of the state's economy and the improved competitiveness of its firms. According to CFED, Kentucky is home to the fourth most diversified economy in the nation, an important foundation for future small business development and expansion. Entrepreneurial energy, however, was rated as average. Its 1996 report card ranks Kentucky 43rd in new companies formed, 23rd in the percentage of change in new companies, and 24th in new business job growth.

The Center's Survey of Small Business Owners asked respondents to evaluate 32 factors that influence small business success in Kentucky. Only four factors garnered more than 50 percent in

the “good” category: general quality of life (66.2); highway system (55.6); telecommunications system (54.7); and quality of universities (51.3). On the other hand, the factors which received the highest percentage of negative or “poor” scores are: availability of tax incentives (73.2); workers compensation rates (69.6); state tax rates (53.2); local tax rates (48.2); responsiveness of government agencies (41.8); and small business assistance services (41.7).

Inputs—The Raw Materials of Entrepreneurship

While we find evidence of considerable latent entrepreneurial energy in Kentucky, it is circumscribed by undereducation, poverty, and income inequality, and by the rural nature of our state. Because Kentucky is far more rural than most states, vital resources, including the capital, talent and support needed to sustain entrepreneurship, are significantly diluted in many rural communities. Importantly, however, improvements to the underlying weaknesses in Kentucky’s human infrastructure are underway. Added focus and resources could transform entrepreneurial potential into real economic strength.

A Supportive Culture. Our research suggests that Kentucky may be home to significant latent entrepreneurial potential: 21 percent of Kentuckians report having actually started businesses and 27 percent of Kentuckians have considered starting a business. We also find that most small business owners in Kentucky find the Commonwealth a good place to launch a new enterprise. When asked if Kentucky offers a friendly environment to entrepreneurs, 59 percent of small business owners responded affirmatively while 41 percent responded negatively. These findings suggest many Kentuckians are risk-takers who value business ownership and that Kentucky is generally a good place to launch a business.

To an unknown extent, however, elements of Kentucky’s culture may inhibit entrepreneurship. In its examination of entrepreneurship in Appalachia, for example, MACED found that many entrepreneurs perceived a negative attitude toward success in the region. The observation, however, could be a product of poor labor-management relations. A lack of receptivity to migrants from other regions, other states and other cultures, however, may inhibit the introduction of new businesses in many locales. The family-centered culture that prevails throughout the state may also be a subtle force that undermines entrepreneurship, discouraging strong associations outside of family boundaries. Conversely, strong family ties could actually help foster entrepreneurship, enabling access to capital and helping forge other community links that facilitate business formation and success.

Strong and supportive networks of business people and organizations that nurture new businesses are a perennial characteristic of successful entrepreneurial environments. Strengthening this capacity will be key to realizing the Commonwealth’s entrepreneurial potential.

Demographic Diversity. Another factor that influences a state’s ability to produce entrepreneurs is the diversity of its population. Diversity provides a natural infusion of ideas, products and new approaches. A recent study by the Center for Entrepreneurial Management in New York City identified immigrants or the children of immigrants as one of nine demographic and behavioral characteristics that most predisposed one to entrepreneurship. Kentucky, however, lacks diversity in its population, a factor that influences the world view and the business conduct of its community of entrepreneurs. MACED concludes that regional insularity impedes exposure to new ideas and to business opportunities that could enable new enterprise development as well as the expansion of existent enterprises. Current population growth trends may help remedy the state’s relative lack of diversity.

Education and Intellectual Capital. Because higher levels of educational attainment are associated with higher levels of entrepreneurial activity, the state’s educational status is an important gauge of its capacity for development from within. While the Commonwealth has ranked near the bottom nationally for many years in terms of educational status, Kentucky is enjoying an education renaissance. The Kentucky Education Reform Act (KERA) is sowing the seeds of dramatic change in our public schools that, over the long term, could produce significant

improvements in the state's educational status. In spite of the progress Kentucky has made in education, it must increase its store of intellectual capital. Key to this effort will be the expansion of opportunities and enterprises that can attract and hold more highly educated people, particularly those who bring technological, scientific and managerial expertise to our economy. Importantly, the state is expected to enjoy fairly robust employment growth in many of these occupational areas between 1994 and 2005.

Management and Support Talent. One of the most important factors in generating entrepreneurial activity is the quality of management and support talent. The most often cited cause of small business failure, after the lack of access to capital, is the lack of managerial expertise. Further, 92 percent of Kentucky bankers rated "strength of management" as "very important" criteria to consider in the loan process. Similarly, 68.6 percent of bankers rated "experience starting/running business" as "very important." Only "strength of business plan," which is clearly related to managerial expertise, was rated more highly; 77 percent of respondents ranked it as "very important."

Financial Capital. Most firms are launched with a relatively modest amount of cash. Results from the Survey of Small Business Owners show that, while 13.8 percent of Kentucky's small businesses were started with \$5,000 or less and 22.7 percent were started with \$10,000 or less, the "typical" amount needed to launch a new small business is around \$40,000. Typically, the modest capital demands for start-ups are met by the savings of the entrepreneur or his or her family and friends or by credit cards. In Kentucky, over half of the respondents to the Survey of Small Business Owners (57.8 percent) reported using money from personal savings, friends, or family to start their business, with \$20,000 being the typical amount (i.e., median) coming from this source. And 43.5 percent indicated they had obtained a bank loan to start their business, with \$45,000 as the typical amount from this source.

Sources of Capital. Many have argued that the lack of sources for growth capital inhibits entrepreneurial development in the state. Indeed, respondents to the Survey of Small Business Owners cited "financing" as the most significant obstacle to launching their business. However, nearly 69 percent of respondents said the loan process was "appropriately demanding" compared with 31 percent who thought it was "overly difficult." From the entrepreneur's perspective, obtaining financing is one of the most difficult challenges in starting a new business, but the data suggest that capital is usually available for resourceful and qualified individuals.

While fewer than half of small businesses in the United States seek external financing in a given year, according to the SBA, those that do typically go to the bank. Today, many banks have abandoned past reluctance to lend to small businesses in an effort to tap new sources of revenue. Between 1994 and 1996, the number of U.S. small business loans made by banks for less than \$1 million increased from 4,322,000 in 1994 to 5,257,000 in 1996. These loans, Inc. reports, were valued at \$163 billion, compared with an estimated \$10 to \$20 billion invested by so-called "angels" (individual investors) and just over \$10 billion by venture capitalists. Clearly, banks are significant players in small business development. Indeed, over 90 percent of the banks in Kentucky currently make loans to small businesses.

Given the importance of banks to entrepreneurial development, the Center asked state bankers if Kentucky has a shortage of capital or a shortage of entrepreneurs. Around 32 percent of bankers said "shortage of capital" while 68 percent said "shortage of entrepreneurs." Somewhat surprisingly, bankers in the state's urban areas are more likely than bankers in rural areas to believe a shortage of capital exists. Regardless of region or whether the bank is in a rural or urban county, a majority of bankers believe that capital is not in as short a supply as entrepreneurs.

Importantly, our analysis also shows that Kentucky banks are well capitalized. A widely used indicator of capital adequacy is the leverage ratio (core capital to tangible assets). According to *Sheshunoff*, the leverage ratio for community banks should be 6 percent at a minimum, and ratios of 7 percent or 8 percent are often required. The average leverage ratio for Kentucky banks in 1996 was 10.3 percent, significantly higher than the recommended 7 to 8 percent. Leverage ratios across

the state's regions show that Kentucky banks have abundant capital. Moreover, an examination of Small Business Administration data shows that Kentucky's banks are not shy about making small business loans. In 1995, according to the SBA, they made 93,404 small business loans of less than \$100,000 or 24.2 loans per 1,000 population.

Venture Capital. When it comes to more speculative, risk-oriented venture capital, the story is not as good. Only six venture capital firms do business in Kentucky, and many believe that the proclivity of early stage venture capitalists to invest in firms that are accessible could be constraining the emergence of growth firms in the state. The Kentucky Long-Term Policy Research Center surveyed 43 venture capital firms and Small Business Investment Corporations in surrounding states within an estimated three-hour drive from the nearest Kentucky border to learn if venture capital will travel. Significantly, 85 percent of these firms expressed a willingness to invest in Kentucky businesses and 25 percent reported having previously had some equity in a Kentucky firm though only 19 percent presently now have equity in one. Kentucky-based businesses have sought capital from 46 percent of the firms surveyed.

These findings suggest that, if a deal has enough merit, venture capital will indeed travel, certainly as far as the three hours in question here. When asked what they saw as the biggest obstacle to making loans in Kentucky, 75 percent or 24 out of 32 of these venture capitalists said they saw no real obstacle to investment in the Commonwealth beyond the need for a sound business plan and a solid management team.

Bank Consolidation. Because commercial banks are the principal providers of the capital that fuels entrepreneurship, some fear that bank consolidation is changing the dynamic between these lenders and small businesses. Small community banks generally recognize that their own success depends on the development capacity of the community, and, it has been suggested, huge multistate and national banks that snatch up community banks undermine the commitment to nurturing small business and local development.

But the evidence suggests this story is inaccurate for a number of reasons. First, one quintile of Kentucky's banks accounted for 48.5 percent of all small business loans and 55 percent of all small business dollars in 1996, but that was the largest—not the smallest—quintile. The smallest 20 percent made only 4.6 percent of the small business loans and loaned only 3.3 percent of the small business dollars. Small banks may be more inclined to make small business loans, but the sheer volume of loans made by bigger banks dwarfs them. Second, Walraven reports, about half of the small bank acquisitions are made by other small banks, and medium-sized banks make most of the rest. Third, according to Walraven, banks that acquire other banks tend to be more aggressive small business lenders than either those they acquire or comparably sized banks not involved in a merger.

Our survey of bankers found that nearly 60 percent of Kentucky bankers believe that further bank consolidation in Kentucky will reduce available capital for entrepreneurs. However, this view was more strongly held by banks that *have not* gone through a consolidation in the past decade. Among those banks that *have* undergone consolidation, two thirds say bank consolidation will have no effect or will increase capital availability for entrepreneurs. Finally, even though the number of banks has decreased in recent years, the share of small business owners who have successfully acquired capital from a bank rose from 76 percent in 1987 to 83 percent in 1995, according to the National Federation of Independent Businesses.

Vision Beyond One's Borders. Successful young companies tend to have a broad geographic reach. Half of *Inc.* 500 companies get more than 50 percent of their revenues from sources outside their region while more than a third get at least some sales from exports. Among the fastest growing firms in a recent national survey, nearly half (47 percent) were exporting while another 6 percent anticipated doing so within a year, Litvan reports. Some Kentucky firms sell far beyond the Commonwealth's borders. Indeed, Kentucky's exports increased from \$4.7 billion in 1993 to \$6.9 billion in 1996, according to Mary Beth Cordy, director of the Kentucky International Trade Office.

Exporting also tends to bring higher wages. Our Survey of Small Business Owners found that average wages rise as businesses make more sales outside their local areas, even though these

externally oriented businesses are slightly more likely to be located in rural counties. In spite of the potential for increased wages and sales, most of Kentucky's small businesses are very parochial. Eight out of 10 respondents to our Survey of Small Business Owners make at least three fourths of their sales locally, and 4 out of 10 make all of their sales locally. Only 15 percent of businesses make at least half of their total sales to customers located more than a one-hour drive away, and just 7 percent report making any sales abroad. International sales usually represent a small share of total sales. About 10 percent say they anticipate exporting their products or services in the future. However, most of these businesses are already externally oriented. Only 6.5 percent of locally oriented businesses expect to sell products abroad in the future, compared with 30 percent of externally oriented firms.

Technology That Meets Market Needs. Information technology helps entrepreneurs communicate with suppliers, find market information, process orders from customers, and do countless other things faster. In addition to accelerating the pace of business, information technology helps businesspeople make more informed decisions. In turn, individual businesses and the overall economy are more efficient. Information technology is also enabling the rapid globalization of the economy. Producers and consumers from the most remote areas of the world are connected as never before, but information technology may have an even larger impact on business-to-business transactions. As electronic commerce becomes the norm, customers and suppliers will expect even the smallest businesses to conduct routine business electronically.

In Kentucky, we found that more than four out of five small businesses use a computer, but far fewer use e-mail, electronic data interchange, or electronic funds transfer. Forty percent have access to the Internet, and 10 percent have a site on the World Wide Web. Clearly, many businesses use their computers strictly for internal functions, such as database management, accounting and word processing, rather than taking advantage of the computer's communications capabilities.

Businesses that *do not* use computers most often indicate that they don't know what kind of hardware or software to use. They cited this obstacle 50 percent more often than cost factors. Lack of knowledge was also the most frequently cited problem for businesses that *already* use computers. They say they have trouble keeping track of all the new products that are available. A close second was the amount of time necessary to train employees to use new equipment. In other words, a lack of knowledge, rather than a lack of money, keeps businesses from using new information hardware and software.

The barriers to technology use may, in turn, adversely affect wages. According to our estimates, workers in businesses that use computers earn 10 to 20 percent more than workers in comparable businesses who do not use computers. This finding is consistent with other studies reporting that technology use on the job raises the earnings of workers. At least one national study by Krueger estimates that workers who use computers earn about 10 to 15 percent more than workers who do not use computers.

One of the most exciting new information technologies is the Internet, of which the World Wide Web is probably the best-known component. The Web will become an increasingly important marketplace for businesses of all sizes. Businesses that currently have access to the Web most commonly use it to gain rapid access to business, market and regulatory information. The second most common use for the Web is researching competitors. One in five businesses reports using the Web to purchase supplies or services. Although only 3 percent use the Web to train employees, that number will probably grow, perhaps rapidly, over the next few years.

Abundant Social Capital. Communities make a difference in the development of small businesses. The relationships between individuals and organizations in a community can significantly influence entrepreneurial success. Higher levels of social capital and trust in a community are believed to lower business transaction costs. Thus business development confronts fewer obstacles.

National surveys show that the percentage of Americans who say they trust others declined from 58 percent in 1960 to 37 percent in 1993. Kentuckians, however, express higher levels of trust. In 1996, more than 56 percent of Kentuckians said they trusted people. But this reservoir of trust has

not translated into widespread support for small businesses. When we asked entrepreneurs if adequate help was available in their local community, rural entrepreneurs in particular found community support lacking. Significantly, 58.1 percent of rural respondents to this survey question said "no," compared to 43.3 percent of urban respondents.

Public Sector Support. The public sector helps build entrepreneurial capacity in a number of ways, from the development of physical infrastructure to direct support for entrepreneurs, including technical assistance, financial assistance, and, in some locations, low-cost business space or incubators. Yet, the results of our Survey of Small Business Owners show that entrepreneurs rarely go to public sector agencies or organizations when they need help. Only about 2 percent sought help from the Cabinet for Economic Development. These entrepreneurs are much more likely to seek help from another small business owner or an accountant.

Why don't these entrepreneurs seek help from the public sector? First, they frequently see government as an obstacle. When asked to identify the most significant obstacle to launching their business, 31 percent of the respondents to our Survey of Small Business Owners said "government red tape," which ranks second only to "financing" (35 percent). In fact, when asked if state government had made the process of starting a business more difficult, an alarming 32.7 percent said "yes." Of the nearly one third who said state government made it more difficult for them to start their businesses, 42.9 percent mentioned "unnecessary regulations," 29.3 percent said taxes are too high, 22.4 percent cited "lack of information," or "not enough assistance," and 5.4 percent said "other." By comparison, when asked if state government had done anything to make the process easier, only 8.5 percent said "yes." Finally, when asked to assess the responsiveness of government agencies to the needs of entrepreneurs, 10.6 percent rated them as "good," 47.6 percent said "fair," and 41.8 percent said "poor."

Additionally, entrepreneurs apparently do not know about all the programs designed to support and help them. We asked these small business owners to indicate their level of familiarity with a variety of programs and services designed to support them. "Very unfamiliar" received the highest percentage of responses for each of these programs and services listed, and in most cases, the second highest rate of response was in the "somewhat unfamiliar" category. For example, 84.6 percent of these entrepreneurs indicated that they were either very unfamiliar or somewhat unfamiliar with the Kentucky Cabinet for Economic Development. Moreover, entrepreneurs with high familiarity with these programs and services are not more likely to rate them as "good." In fact, these results seem to suggest that the opposite is true: entrepreneurs with high levels of familiarity are more likely to rate the responsiveness of governmental agencies as "poor." Clearly, these survey results show that governmental agencies need to market their programs and services more effectively *and* become more attuned to the needs of entrepreneurs and small business owners.

Small business *incubators*, the best of which provide nascent businesses with low-cost business space, access to shared business equipment and services, and guidance from experienced staff in key areas of business development, are another important public sector programmatic response. A recent study finds that small business incubators offer public investors big returns. Based on a survey of 126 firms that entered incubators between 1990 and 1996, researchers found that the average firm had increased sales by 400 percent since its entry into the incubator and increased jobs from 4.5 to 13. Hayhow reports that the study also found the average cost per job created by business incubators was \$1,109, a remarkable bargain compared with the per-job price tag often attached to industrial recruiting. Kentucky, however, has few incubators.

The results of our survey suggest that the Commonwealth may have an insufficient quantity and/or quality of technical assistance to enable entrepreneurial development. Moreover, available assistance is poorly marketed and, by the assessment of entrepreneurs who are familiar with it, less than satisfactory. Clearly, a reevaluation of how these services are structured, delivered and marketed is needed.

Outcomes—Entrepreneurial Products

By many aggregate measures, the products of Kentucky entrepreneurship are neither of the quantity nor the quality we would hope for. Instead, the state's performance by a number of traditional measures is anemic at best. The rural character of our state dilutes resources and thus blurs the portrait of made-in-Kentucky entrepreneurship. Because, among other things, urban populations are more educated, enjoy significantly higher earnings, and form far more businesses, the Commonwealth's poor overall performance by a number of measures is a reflection of the historic weaknesses of rural economies. Nevertheless, the products of Kentucky's comparatively weak inputs suggest real promise.

Income. Perhaps the most significant measure of the outcomes of a state's economy is its ability to produce results in the lives of its citizens. Between 1994 and 1996, median household income in Kentucky rose at the third fastest pace in the nation (7.2 percent), but historic and persistently high rates of poverty dilute the impact of even high rates of growth. According to the Census Bureau, only nine states, including neighboring Tennessee (\$30,327) and West Virginia (\$25,270), reported lower three-year averages for median household income between 1994 and 1996 than Kentucky (\$30,420).

Seedlings. Self-employed individuals, nonfarm proprietorships and new business establishments help gauge the entrepreneurial vitality of a state. Many self-employed individuals work from their homes, more than 4.1 million nationally, according to the Bureau of Labor Statistics. Though they ordinarily serve local markets exclusively and do not offer substantial potential for expansion, growth in their numbers may be indicative of entrepreneurial vitality. Kentucky's estimated self-employed population is comparable to that in surrounding states. Nonfarm proprietors' income in Kentucky, however, was among the lowest in the southeast region and among surrounding states in both 1994 and 1995, according to the Bureau of Economic Analysis. However, Kentucky's rate of growth in nonfarm proprietorship income between 1994 and 1995 (8.6 percent) exceeded the national average (8.0 percent) and was ranked 19th nationally, according to the SBA.

A fairly steady stream of new firms has emerged in Kentucky. Between 1994 and 1995, the number of new firms increased by 12.6 percent, ranking seventh in the nation, according to the SBA. Recent SBA figures rank Kentucky 44th in the number of new firms per 1,000 population. To many, these data confirm Kentucky's inability to create and grow high-performance companies. However, if ranked per 1,000 urban population, Kentucky moves from 44th to 23rd.

Initial Public Offerings. Those enterprises that accumulate sufficient capacity to make an initial public offering (IPO) of stock in their companies are able to achieve very rapid growth. But IPO data is an imperfect measure of a state's entrepreneurial capacity in that a measure of self-selection is involved. The very nature of some businesses precludes the need to go public in order to generate capital to finance growth objectives. Indeed, only a tiny fraction of some of the fastest growing companies in the nation opts to go public. Most simply never become large enough to issue an IPO while others choose to remain private.

Clearly, publicly traded growth companies are engines of economic growth. In 1993 and 1994, according to the Securities Data Company, the United States had \$70 billion of initial public offerings, as much as in the previous six years combined. Recent contributions of Kentucky companies, however, have been minimal. Between January 1, 1993, and December 31, 1995, only 6 companies headquartered in Kentucky went public compared with 31 in neighboring Indiana and 54 in Tennessee, according to data compiled by the Louisville Area Chamber of Commerce. More recently, however, Goetz and Freshwater report that Kentucky ranked 17th in the nation in critically important technology-sector IPOs per million persons during 1996 and 1997.

Inc. 500 Companies. Since 1982, *Inc.* magazine's annual *Inc.* 500 list has provided a compendium of the nation's fastest growing firms ranked by their rate of growth. Again, significant self-selection is involved in that companies apply for inclusion on this annual "who's who" of entrepreneurs. Firms that seek inclusion on the *Inc.* 500 list may do so to broaden their customer

base or, perhaps more importantly, to attract capital. Kentucky firms, like Tekno in Cave City, which designs and builds automated manufacturing systems, and Louisville-based Tova Industries, which manufactures dehydrated food products, have made multiple appearances on the *Inc.* 500 list. But many high-growth companies simply never bother to apply for recognition of their high-growth status.

In spite of its limitations, the *Inc.* 500 list indicates the aggressiveness of the entrepreneurial community in a state. However, the aggregate number of appearances is a reflection of a state's population and, we find, the level of urbanization. In an analysis of *Inc.* 500 firms in all 50 states, we found an almost perfect correlation between urbanization and the number of *Inc.* 500 companies. Indeed, the wide disparity aggregate numbers suggest when Kentucky is compared to surrounding states disappears completely when these data are controlled for urban population.

Trends Influencing Entrepreneurial Development

To prosper in the years ahead, we must view change as the opportunity to transform our economy, to repair its inequities and to create enduring prosperity. To do so, we must listen carefully, ask questions, watch for opportunities and act nimbly and quickly when they appear. In short, we must become more entrepreneurial in all that we do. Here we consider some of the trends that will influence our ability to cultivate an entrepreneurial economy in Kentucky.

"The Future That Has Already Happened"

About what lies ahead, some things are virtually assured. Global trade will continue to exert profound influence on our lives, as it continues to force the organizational change that fuels the decentralization of employment patterns now underway. Technology also will continue to produce dramatic, revolutionary change, as the Internet gradually becomes the marketplace of the world, just as the tools driving it have become the engines of our economy. A state-of-the art electronic infrastructure opens windows to new markets, ideas and innovations, competitive sources of goods and services, cost-saving electronic exchanges, and more. Further, it allows rural enterprises to become real players in the larger economy.

Widely anticipated demographic changes will continue to alter the face of our population, as well as the circumstances of our lives. In turn, business will change. As Baby Boomers move into their retirement years, they will create new consumer demands as well as entrepreneurial opportunities to meet them. The unexpected population growth Kentucky is now experiencing is due largely to migration, particularly among retired natives of the state. If this migration trend holds, it bodes well for entrepreneurial opportunity throughout much of Kentucky.

Because older, less risk-inclined people are generally not likely candidates for entrepreneurship, Kentucky's aging population might be expected to dilute entrepreneurial energy. But the dynamics of aging are changing. Older citizens are more educated, in better health and more active than ever before. According to *Inc.*, while the vast majority (82 percent) of 1997 *Inc.* 500 CEOs were under 50 years of age, 13 percent were between the ages of 51 and 60, and 5 percent were 61 or older. Aided by the benefits of accumulated wealth and skill, more older citizens are likely to assume entrepreneurial roles in the years to come.

In addition to the aging of our population, the growing predominance of time-pressed, two-wage-earner households is expected to continue driving a high demand for products and services that enable greater convenience. Workers in the low-wage, service industry jobs these demands are creating will likely join the lower half of an economically divided population that has already emerged, with a "cost-is-no-object" group on one end and a "cost-is-the-object" group on the other. Our willingness to understand these and many other trends *and* to respond to them nimbly will ultimately determine whether Kentucky lifts itself out of a century-long tradition of economic disadvantage or remains anchored to the past.

Doing Business on the World Wide Web

Perhaps the most important innovation for business in the 1990s is the World Wide Web. While it did not exist a decade ago, furious competition among information technology companies has led to rapid improvements in the capabilities of the Web. Today, users can view live video, listen to live audio, exchange information and ideas in “real time,” and make purchases online in a relatively safe environment. Moreover, customers can make purchases from a company without ever knowing where it is located.

Online shoppers are on the rise, as are online revenues. One market research firm reports that the percentage of Web users who make purchases online rose from 19 percent in 1995 to 27 percent in 1997. Forrester Research estimates that online transactions will total \$9 billion in 1997. Still others use the Web to research products or services they want to buy. In fact, more than 20 million Americans have come to view the Internet as an indispensable part of their lives. This powerful tool could be a boon to Kentucky’s businesses, particularly rural ones.

But few Kentucky firms are using the Web. At best, we find that less than 1 percent of Kentucky businesses had a Web site at the time we collected data. Further, an analysis of 1990-1996 data on registered web sites found that while the number of Kentucky sites has expanded dramatically, it is one of the lowest among surrounding states. Kentucky businesses are moving more slowly than those in surrounding states to seize the opportunities that a presence on the World Wide Web provides.

In a survey of Kentucky businesses with web sites, we found them to be concentrated in the state’s urban triangle, but a handful of rural counties have a higher percentage of businesses on the Web than Lexington, Louisville, or Northern Kentucky. These businesses sell almost every product and service imaginable, from Thoroughbreds to teddy bears. Three fourths of Kentucky’s businesses with Web sites believe the World Wide Web has helped them, and nearly all believe it will help them over the next five years. A little more than half of the businesses believe having a Web site has increased sales, helped them sell to people in new geographical areas, and helped them sell to new kinds of customers.

And web site development is an emerging business in its own right. Though 40 percent of Kentucky’s Web businesses created and developed their own sites, nearly half left their Web site creation entirely to someone else. The remaining 10 percent combined internal efforts with outside help.

A Rising Commitment to Microenterprises

While the high-growth firms of the larger U.S. economy continue to dazzle the marketplace, they are rare, particularly in a largely rural state like Kentucky. Far more common but virtually invisible by comparison are what are now commonly referred to as “microenterprises,” tiny, often home-based businesses that usually employ no more than five people. Tiny though they are, the economic impact of microenterprises is dramatic. In 1995, the SBA estimates that microfirms employing between one and four people created 35 percent of the net new U.S. jobs. Moreover, the Information Age economy has yielded example after example of exponential growth among what began as tiny businesses.

In addition to their job creation potential, microfirms are increasingly viewed as a viable antidote to poverty. International microenterprise development models have achieved remarkable success in alleviating poverty in the developing world by giving poor entrepreneurs fair access to credit. Building on international successes, the movement to enable the formation and development of microenterprises has gained significant ground in the United States. In an effort to help poor people seize entrepreneurial opportunities, a strong “bottom-up” strategy has emerged. Today, microenterprise development is being recognized nationally, incorporated into welfare reform initiatives, and adopted by a growing number of state and local governments to increase personal income and respond to welfare reform.

Specifically, a growing number of states have launched initiatives aimed at expanding access to credit and business development assistance among the poor. According to the Corporation for

Enterprise Development, 19 states now dedicate funds to microenterprise development. But in spite of compelling findings about the early successes of U.S. initiatives as well as long-standing international ventures, state efforts, according to the Corporation for Enterprise Development, focus mainly on the capitalization of loan funds, rather than on the development and maintenance of support programs, without which many believe these initiatives will not achieve their full potential.

Strategies for Change

Neither legislation nor alterations of public policy alone will infuse the state with much-needed entrepreneurial energy. Instead, the pursuit of entrepreneurship will be a long-range process, one that aims, first and foremost, to engender a new culture, new perspectives on our communities as places of possibility rather than insoluble economic dilemmas, and new images of ourselves as a people who possess the power to transform their communities and, ultimately, the entire Commonwealth. In short, what is needed is a comprehensive effort, one that is strongly supported at the highest levels of government by all its institutions and broadly advanced at the local level. Fortunately, a remarkable convergence of thinking on how to advance entrepreneurship and grow Kentucky's wealth of small enterprises has emerged. Our findings here support many of these conclusions, and recommendations, including:

- ***Nurture and Cultivate an Entrepreneurial Culture.*** Like the Kentucky Science and Technology Council and MACED, we conclude that vigorous efforts are needed to teach entrepreneurial thinking *and* to change public perceptions.
- ***Strengthen Support for Entrepreneurs and Small Business.*** In order to accurately gauge our programmatic capacity, a comprehensive assessment is needed to identify service delivery gaps and assess the performance of existent services before we invest in new services. Clearly, effective marketing of services to entrepreneurs and small business is key to success and it should be a strong component of any budget.
- ***Focus Efforts at the Local Level.*** We join the Kentucky Appalachian Commission, KSTC and MACED in recommending that all services and any new resources allocated to finance gaps in our provider network be localized. Centralized efforts to assist small firms should be confined to research, information, technical assistance, training for local developers, and grants to facilitate activity at the local level.
- ***Exploit the Vast Potential of the Internet.*** In addition to exploiting the power of technology to close information gaps, public entities can help encourage web site development by tracking its impact on commerce in the state, creating a grants program that will enable local organizations to establish a presence on the World Wide Web, training more entrepreneurs to develop web sites, and loosening the reins on such public resources as coal severance dollars.
- ***Build Assets.*** Our constant challenge, that of increasing wealth, particularly among low-income Kentuckians, is central to the entrepreneurial equation. A strong programmatic response at the local level is needed to address the need for access to credit among the poor and to help low-income Kentuckians increase assets through such vehicles as Individual Development Accounts.
- ***Address Inequities.*** In spite of phenomenal national growth in women- and minority-owned firms, a Governor's Commission has found that equal opportunities may not be available in Kentucky. Careful study of obstacles such as those identified in national studies and more prescriptive responses are in order to unleash the full potential of those individuals who do not figure prominently in our demographic profile of entrepreneurs.

Conclusion

The future happening all around us compels attention to the development of timely, responsive public policy. Development is no longer simply a matter of creating jobs, of recruiting “value-added” industries that will employ citizens of the Commonwealth. Information and the tools that enable its production, manipulation and dissemination now dominate our economy, hardly the “goods” of the recent past. Today’s development challenge demands that we shift our focus from the mobile industries we have assumed will be the salvation of local economies to the cultivation of entrepreneurial capacity and business development within the Commonwealth.

Our resource-rich state suffers from a shortage of the very raw materials that are believed to foster entrepreneurship. The enduring legacy of undereducation, a lack of diversity in our population, and an inadequate store of management talent adversely affect our ability to generate and sustain new enterprises. Moreover, we find that Kentucky entrepreneurs have little familiarity with a variety of state and federal programs designed to assist them. Those who are familiar with these services often find them less than satisfactory, suggesting that our infrastructure of public support for entrepreneurial development is, at best, weak and, at worst, ineffective. Among small business owners, government is viewed as more of a hindrance than a help in development. Consequently, our public response to the mix of raw materials we bring to entrepreneurship appears to be inadequate. As some of the most dynamic economies in the world have demonstrated, we can build a far more innovative and entrepreneurial culture, one that responds to the needs of people and firms and that creates wealth and opportunity.

In doing so, we will discover and make possible new opportunities in unexpected places across the Commonwealth. Perhaps more important, we will begin changing the mindset that has imprinted upon generations of Kentuckians the belief that they must leave their home state in order to prosper. Through the development of a far more entrepreneurial economy, we can transform the Commonwealth from a place that citizens return to in their retirement years after they have accumulated wealth in another place to a place where people can build wealth, whether they are young or old. And we can begin to counter the misguided notion that the best hope for rural Kentucky is the migration of its unemployed and underemployed to urban areas with temporary labor shortages. While our highly mobile labor force will continue to adapt to economic circumstances as needed, the public suggestion that abandonment is a solution to rural economic shortcomings runs counter to the larger, widely shared goal of retaining more young people and more of the state’s best and brightest. Beyond our already strong urban triangle, rural as well as urban areas across the Commonwealth hold enormous potential for small business development by people who consciously choose the quality of life small towns offer. Through policies and practices that enable entrepreneurship and small business development, we can help more of these individuals create and spread wealth. We can capture more of the enterprise within us.

Glossary

ADD	Area Development District
AFSMCE	American Federation for State, Municipal and County Workers
BITAC	Business and Technology Assistance Center
BLS	Bureau of Labor Statistics
BSSC	Bluegrass State Skills Corporation
CED	Council for Entrepreneurial Development
CEO	Chief Executive Officer
CFED	Corporation for Enterprise Development
DBED	Business & Entrepreneurship Development Division
DLG	Kentucky Department for Local Government
EDA	Economic Development Administration
EDI	Electronic Data Interchange
EFT	Electronic Funds Transfer
EPSCoR	Experimental Program to Stimulate Competitive Research
GATT	General Agreement on Tariffs and Trade
HEAD	Human/Economic Appalachian Development
HUD	Housing and Urban Development
IDA	Individual Development Account
IPO	Initial Public Offering
ISO	International Organization for Standardization
ISO 9000	International Organization for Standardization (guidelines)
ITO	International Trade Office
IWPR	Institute for Women's Policy Research
KEDFA	Kentucky Economic Development Finance Authority
KEEP	Kentucky Economic Expansion Program
KERA	Kentucky Education Reform Act
KSTC	Kentucky Science and Technology Council
LCC	Louisville Area Chamber of Commerce
LRC	Legislative Research Commission

MACED	Mountain Association for Community Economic Development
MIT	Massachusetts Institute of Technology
NAFTA	North American Free Trade Agreement (Area)
NBIA	National Business Incubation Association
ROI	Return On Investment
R&D	Research and Development
SBA	Small Business Administration
SBDC	Small Business Development Center
SBIC	Small Business Investment Corporation
SBIR	Small Business Innovation Research (grant)
SCOR	Small Corporate Offering Registration
SCORE	Service Corps of Retired Executives
SEID	Self-Employment Investment Demonstration
SELP	Self-Employment Learning Project
TRP	Technology Reinvestment Project
URL	Uniform Resource Locator
USDA	United States Department of Agriculture
WINGS	Women's Initiatives Networking Groups
WWW	World Wide Web

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As with all our products, this report is the product of a team effort. Each member of the Center's staff not only contributed to this report in the expected ways of research and writing, they also conducted hundreds of small, often laborious tasks that made the production of this document possible. Billie M. Sebastian brought her proofreading, document construction, and editorial expertise to the final product, in addition to inputting significant quantities of data. Peter Schirmer designed and constructed the survey of businesses on the World Wide Web, input data, and conducted data analysis. Michal Smith-Mello constructed and designed surveys, input data, designed the text and the cover, and constructed the overall document. Our Executive Director Michael Childress authored the troubling idea of studying entrepreneurship, designed and constructed surveys, input and analyzed volumes of data, constructed technical appendices, and provided overall management and editorial direction.

While many individuals contributed to this report, the Kentucky Long-Term Policy Research Center assumes full responsibility for its content. We welcome any and all comments.

Introduction

... mighty things from small beginnings grow.
John Dryden, 1667

The pursuit of greater wealth for citizens of the Commonwealth has frustrated its leaders throughout modern history. Today, it remains a preeminent yet elusive goal. Disproportionate poverty, the nation's third highest gap between rich and poor,¹ low wages, and an historically poor educational status continue to inhibit development of the state's economy. While the Census Bureau estimates that median income in Kentucky has risen in the 1990s at a pace faster than in all but two other states, the portion of Kentuckians living in poverty has barely budged.² Between 1993 and 1995, the state's average overall poverty rate was estimated at 17.9 percent³ compared to 19 percent in 1989. We are making progress but the ground left to be closed is vast.

Kentucky's political leaders have responded to the Commonwealth's stubborn problems. They have brought vigorous attention to the reform of elementary, secondary and, more recently, higher education. In doing so, they have invested in long-term strategies for economic revitalization, in the critical repair of structural deficiencies. Early indications suggest that returns on this investment have already begun to accrue. Our political leaders have also led aggressive efforts to recruit business and industry to underdeveloped regions of our state, and they have enjoyed considerable success. But too often, industries are attracted to the short-term benefits our low-wage economy offers, rather than to the long-term riches of our quality of life. That attraction, as recent experience has so clearly illustrated, is likely to continue propelling these mobile industries to offshore locations that offer even cheaper labor. Meanwhile, industries that have come here to capitalize on our deficits, rather than those that emerge from our considerable strengths, enjoy the advantage of lucrative tax incentives. The long-term price of this short-term solution to our structural economic problems may well be depleted coffers and the continuous drain of our brightest young citizens who will seek something better than a low-skill, hourly wage job.

Here we argue that our economic development efforts must place a far stronger emphasis on building from within. Such an approach demands that we continue our efforts to expand the capabilities of citizens and communities and repair the structural inequities created by undereducation and poverty. We conclude that economic development efforts also must include a new, far stronger focus on entrepreneurship and small business development. This work will not be the job of a single cabinet in state government burdened with the awesome responsibility of reversing decades of economic stagnation. And it will not preclude thoughtful, strategic industrial recruitment. Nor will it produce immediate results. Rather, it will require the sustained efforts of governments, institutions and citizens across the Commonwealth. Ultimately, it demands that we fundamentally change our attitude about development from one of believing that our economic salvation lies in the hands of someone somewhere else to one of believing in our own capabilities, from one of waiting for opportunity to arrive to one of making it happen in the communities where we live. We conclude that,

¹ Corporation for Enterprise Development (CFED), *The 1996 Development Report Card for the States* (Washington: CFED, 1996).

² R.A. Zaldivar, "U.S. Incomes Up, But 13.7% Still Poor," *Lexington Herald-Leader* 30 Sept. 1997: A1.

³ U.S. Bureau of the Census, *Poverty in the United States: 1995*, Series P60-194 (Washington: U.S. Department of Commerce, 1997).

over the long term, the benefits of such an approach to development promise to be far more enduring than those that focus nearly exclusively on attracting mobile firms.

Instead of the economic vulnerability many communities now experience in the wake of garment industry shifts of hundreds of jobs to offshore locations, we can develop far more resilient, more diverse local and regional economies that are buoyed by homegrown enterprises with strong links to people and place. We can develop rewarding work that increases the wealth of individuals, families, communities and the Commonwealth. And we can give our brightest young people a reason to stay in—or perhaps return to—Kentucky. Over the long term, we can achieve sustainable development.

Many would counter that efforts to strike an entrepreneurial spark in Kentucky are doomed to failure. The state, they argue, does not have the requisite human capital and financial resources needed to foster a robust entrepreneurial climate. However, we find that many of the aggregate measures that suggest limited entrepreneurial capacity are really just reflections of the state's rural character. Our own research indicates that Kentucky has the foundation on which to build an entrepreneurial economy and that shrewd development initiatives can capitalize on the many advantages the state has to offer. These initiatives must include innovative efforts to discover entrepreneurial levers that will benefit the rural economies of Kentucky. By bringing a more entrepreneurial approach to the dilemma of rural development, we can begin to move toward constructive solutions to age-old problems.

Data and Methodology

This report includes results from a series of surveys intended to provide *new* information about Kentucky's entrepreneurial climate. Here, we offer important new data about Kentucky's capacity for entrepreneurial development from a series of Kentucky Long-Term Policy Research Center surveys. They provide information about:

- The entrepreneurial capacity of Kentuckians
- The availability of venture capital in the region
- The backgrounds, experiences, needs and perceptions of Kentucky entrepreneurs
- The conclusions and assessments of Kentucky bankers about capital availability and entrepreneurial potential in the Commonwealth
- The experiences of Kentucky business owners who have embraced the World Wide Web as a business tool.

General Population Survey. Our data on the entrepreneurial inclinations of Kentuckians are derived from questions that the Kentucky Long-Term Policy Research Center included in the June 1996 semi-annual general population survey conducted by the University of Kentucky Survey Research Center. Households were selected using random-digit dialing, a procedure giving every residential telephone line in Kentucky an equal probability of being called. Calls were made from December 9, 1996, until January 8, 1997. The sample includes noninstitutionalized Kentuckians 18 years of age and older; 676 interviews were completed. The margin for error is slightly less than 3.9 percentage points of the 95 percent confidence level.

Survey of Small Business Owners in Kentucky. In the summer of 1997, the Kentucky Long-Term Policy Research Center conducted a 14-page mail survey of Kentucky entrepreneurs. A complete copy of the survey, "Growing an Entrepreneurial Economy: The Ladder to Small Business Success," appears as Appendix A to this report. For the survey, the Center used a mailing list provided by the Department of Employment Services, Workforce Development Cabinet, that included 6,000 firms that had become subject to Unemployment Insurance coverage in 1995 and employed

fewer than 20 people at the time they became subject. Approximately 183 surveys were undeliverable due to insufficient or out-of-date addresses. Entrepreneurs who responded to the survey and reported having expanded employment rolls during the intervening time period were retained in our database. The Center received 533 completed surveys.

Survey of Bankers. To complement our base of information about entrepreneurial potential in the Commonwealth, we surveyed Kentucky banks in an effort to gauge the availability of capital from these traditional small business lenders. A copy of our survey, “Growing an Entrepreneurial Economy: Financing Small Businesses in Kentucky,” appears as Appendix B to this report. This survey was sent to 344 banks and other lending institutions during the spring of 1997. The Center received 95 completed surveys.

Survey of Venture Capital Firms. During the winter of 1997, the Kentucky Long-Term Policy Research Center conducted a survey of readily accessible venture capital firms in surrounding states. Assuming that venture capitalists in the state are investing in Kentucky firms, we turned our attention to venture capital firms and Small Business Investment Corporations (SBICs) in neighboring states. The firms included in our survey are listed in the 1996 edition of *Pratt’s Guide to Venture Capital Sources*. Our survey was based on a 1990 survey, “Venture Capital Firms Within Reach of Kentucky Ideas,” prepared by Thomas M. Bailey, now an economist with the Economic Development Cabinet. In the survey, we sought general information about the availability of capital within a day’s round-trip, the firm’s history with Kentucky entrepreneurs, any obstacles to investment in Kentucky firms, etc. The 25 venture capital firms and 18 SBICs surveyed are located in Indiana, Ohio, Tennessee and West Virginia. A copy of the questionnaire used in this telephone survey appears as Appendix C to this report.

Survey of Businesses on the World Wide Web. In order to learn more about the impact of the Internet on firms in the state, we first identified Kentucky firms that have a presence on the World Wide Web, then surveyed those firms about such issues as the creation, cost and impact of that presence. We mailed a survey to each of the 719 identified Kentucky businesses with a Web site during the spring and summer of 1997. The Center received 408 responses to the survey. The 10-page survey, “Growing an Entrepreneurial Economy: Doing Business on the World Wide Web,” appears as Appendix D to this report.

Study Outline

We begin this report with a chapter that provides a detailed response to the central question, “Why entrepreneurship?” It includes discussions of new labor market realities and of the potential returns from entrepreneurship. In this chapter, we also consider the potential economic and social benefits of cultivating entrepreneurship and innovation. We then turn to a profile of Kentucky’s entrepreneurs based on our Small Business Survey: who they are, what fuels their entrepreneurial energy, where they garner support, and what would assist them in their enterprises. Following the lead of University of Kentucky researchers, we next examine Kentucky’s inputs, the raw materials of entrepreneurship, and outputs, the products we realize from our base of resources. We then turn to an exploration of trends that are likely to influence the course of entrepreneurship in the state, including the World Wide Web’s increasing role in business development and new political attention to the smallest of small firms, microenterprises. Finally, we outline some policy options, ways state and local policymakers can help facilitate entrepreneurship and small business development.

Why Entrepreneurship?

*In the New Economy, the business cycle is the child of innovation and product development.*⁴

Changes in our economy and our society are redefining how we live and work, build successful enterprises, and develop economic opportunity. To ensure the economic well-being of citizens, government must adapt to these changes. But change is perhaps the hardest thing for any organization to do because it requires innovation. Management theorist and social philosopher Peter F. Drucker defines innovation as the capacity to identify and seize opportunities. “Innovation requires us to systematically identify changes that have already occurred in a business—in demographics, in values, in technology or science—and then look at them as opportunities. It also requires something that is most difficult for existing companies to do: to abandon rather than defend yesterday.”⁵ To unleash entrepreneurship and innovation, the public sector must, as Drucker suggests, “view change as an opportunity, not a threat.”⁶

Successful adaptation to these changes will depend on many factors, but entrepreneurial energy is key. Innovation and entrepreneurship enable private enterprises to compete effectively, public agencies to serve wisely and efficiently, and nonprofit or Third Sector organizations to fill the gaps between the two. Entrepreneurial energy is manifested in skilled workers with the capabilities needed to negotiate a changing employment context; in innovative firms that discover new markets, create new products and services, and achieve high performance through state-of-the-art technology, organization and management; in communities that cultivate a high quality of life; in public-private partnerships that enable prudent public investment; and in a business climate that supports, enables and advances entrepreneurship.

To unleash entrepreneurship and innovation, the public sector must, as Drucker suggests, “view change as an opportunity, not a threat.”

Cultivating innovation and entrepreneurship is also key to future economic development. High-performance organizations that train and empower employees to innovate *and* share the rewards of those innovations have experienced high rates of profitability, productivity and participation in the global marketplace.⁷ A *Business Week* assessment of the management qualities that have fueled the enormous success of Silicon Valley, the nation’s premier entrepreneurial environment, suggests that the democratization of firms, the replacement of vertical hierarchies with horizontal networks, has been key to its ascendance.⁸ Compensation systems that reward the achievements of all employees⁹ have helped stimulate employee commitment and productivity. The Valley’s remarkable rebound

⁴ “Panic in the Year 2000,” *Business Week* 2 Mar. 1998: 154.

⁵ George Gendron, “‘Flashes of genius’: Peter Drucker on entrepreneurial complacency and delusions . . . and the madness of always thinking you’re number one,” *The State of Small Business* (Special Issue of *Inc.*) 15 May 1996: 30.

⁶ Drucker, *Innovation* 183.

⁷ Thomas A. Kochan and Paul Osterman, *The Mutual Gains Enterprise* (Cambridge: Harvard Business School Press, 1994).

⁸ Ira Sager, “Cloning the Best of the Valley,” *Business Week* 25 Aug. 1997: 146.

⁹ Sager 147.

from crisis in the early 1990s is also attributed to a collaborative effort that united hundreds of people from business, education and labor in a successful effort to develop “local solutions to pressing problems in education, regulation, and business retention.”¹⁰

Here we argue that the entrepreneurial path is the right one for the state’s development efforts to follow. Doing so will complement influences already underway. The most explosive growth in the state is occurring in the small business segment, and projections indicate that the most job growth will occur among the types of skills that can be developed by small businesses. Furthermore, entrepreneurship offers substantial returns on investment in the form of high-quality jobs, greater equity, innovation, economic diversity, and wealth generation. However, to garner these benefits the state’s development policy will have to accommodate a new focus: one that brings equal attention to fostering entrepreneurship.

The Business of Kentucky Is Small Business

In response to dramatic economic change, the number of small firms and the employment opportunities they create are growing at the national as well as the state level. According to the U.S. Small Business Administration (SBA), the number of small businesses increased 49 percent between 1982 and 1995.¹¹ In 1996 alone, SBA’s Office of Advocacy reports, an estimated 842,000 new employer firms were launched,¹² edging ahead of a record 819,477 new employer firms in 1995.¹³ Sole proprietor firms brought the 1996 total to an estimated 1.3 million start-ups, accord-

ing to SBA.¹⁴ In 1995, an estimated 16 million sole proprietors were engaged in some type of entrepreneurial activity.¹⁵

The Bureau of Labor Statistics estimates that between 1994 and the year 2005 those segments of the economy dominated by small firms will contribute 60 percent of new jobs.¹⁶ As illustrated in Table 1, Cognetics, a Cambridge, Massachusetts, firm that specializes in tracking small firm

TABLE 1 U.S. Job Growth by Sector, Firm Size, 1991-1996 (percent of firms)			
	All Firms	Firms w/1-99 Employees in 1991	Firms w/100 or More Employees in 1991
Manufacturing	0.4%	9.9%	-2.4%
Trade	2.2%	3.9%	0.2%
Finance, Insurance, Real Estate	-0.3%	3.0%	-2.2%
Services	3.4%	7.2%	0.8%
Other	0.8%	4.4%	3.2%
<i>Source: Cognetics Inc.</i>			

employment, reports that job growth in every sector of the economy between 1991 and 1996 was largely attributable to firms with fewer than 100 employees.¹⁷ And in Kentucky, small business

¹⁰ Douglas Henton, John Melville and Kimberly Welsh, *Grassroots Leaders for a New Economy* (San Francisco: Jossey-Bass, 1997) 4.

¹¹ U.S. Small Business Administration (USSBA) Office of Advocacy, “Facts About Small Business—1996,” online, SBA, Internet (available at: <http://www.sbaonline.sba.gov/advo/stats/fact1.html>).

¹² Brian Headd, U.S. Small Business Administration Office of Advocacy, personal interview, 28 Aug. 1997.

¹³ USSBA, “Facts . . . 1996.”

¹⁴ Friedman, E.M.

¹⁵ USSBA, “Facts . . . 1996.”

¹⁶ USSBA, “Facts . . . 1996.”

¹⁷ Friedman, E.M.

(firms with under 500 employees) created all of the *net* new jobs from 1992 to 1996.¹⁸ In fact, Table 2 shows how businesses with fewer than 20 employees were responsible for 52.6 percent of the small business job growth, representing 67,744 jobs.

A highly diversified small business community has long been the backbone of the Kentucky economy, contributing the lion's share of jobs, regardless of the definition of small business. While the immense contributions that large firms, such as Ashland Inc., Ford, General Electric, Humana and Toyota, have made to Kentucky's economic and social health are undeniable, these firms may be reaching the limit of their ability to spawn significant employment growth. While Ford and Toyota have continued to expand in response to highly successful product lines, General Electric has announced that 1,500 jobs could be lost at its Louisville Appliance Park if it opts to move production lines to Mexico.¹⁹

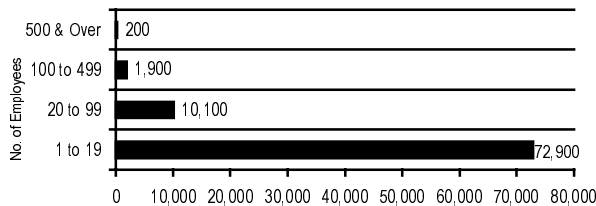
The creation and expansion of small enterprises, on the other hand, afford a

TABLE 2
Kentucky Job Growth by Major Industry
and Employment Size of Firm, 1992-1996

	Number of Employees					Totals
	1-4	5-19	20-99	100-499	500+	
All Industry	36,247	31,497	22,254	38,753	(14,770)	113,979
Manufacturing	1,134	2,792	5,622	14,572	(19,593)	4,526
Retail Trade	3,727	4,353	3,933	4,588	(5,891)	10,710
Services	21,543	14,748	8,612	16,769	18,559	80,230
Other	9,843	9,604	4,087	2,824	(7,843)	18,514

Source: U.S. Small Business Administration

FIGURE 1
Business Establishments in Kentucky, 1995

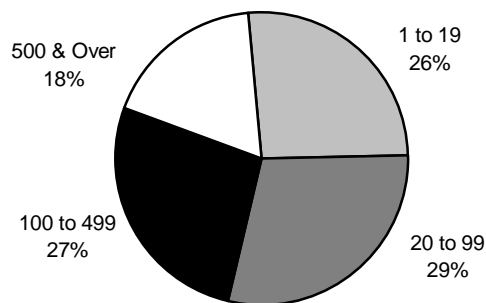


Source: County Business Patterns, 1995

virtual wellspring of potential growth. In fact, while the payrolls of Fortune 500 companies, which peaked at 16 million employees in 1979, dwindled to 12 million by 1995, the "invisible entrepreneurial economy" had created approximately 24 million new jobs.²⁰

As illustrated, establishments with fewer than 500 employees, which the SBA defines as small businesses, comprised the overwhelming majority of state firms and employed 82 percent of Kentuckians in 1995.²¹ As Figure 1 shows, less than 1 percent of the state's firms employ 500 or more people. Genuinely small businesses, those with fewer than 20 employees, however, represented 85.7 percent of all firms

FIGURE 2
Distribution of Employees in Kentucky
by Size of Business Establishment, 1995



Source: County Business Patterns, 1995

Note: These data do not include government or farm workers.

¹⁸ USSBA, "1997 Small Business Profile."

¹⁹ Associated Press, "Louisville May Lose 1,500 GE Jobs," *Lexington Herald-Leader* 7 Feb. 1998: B2.

²⁰ W.E. Wetzel, Jr., "Angels in America: Creating New Capital Markets for Emerging Ventures," *Southern Growth* (Southern Growth Policies Board) Summer 1996: 21.

²¹ Bureau of the Census, *County Business Patterns 1995* (Washington: U.S. Department of Commerce, 1995).

in the state in 1995 and employed 26 percent of Kentuckians. Further, establishments with fewer than 100 employees employed 55 percent of Kentuckians and comprised 97.5 percent of all establishments in the state (see Figure 2). Given national trends, firms of this size have likely increased in number and in the number of Kentuckians they employ over the interim two years for which these data are not yet available.

New Labor Market Realities

Meanwhile, the old economy, the target of many of public policies, continues to ebb. Low-skill jobs, like the thousands lost at Union Underwear and Fruit of the Loom plants in Kentucky during 1997, are predicted to continue their drift offshore. Without skills and a measure of entrepreneurial capacity, many of those who are displaced will face enormous difficulty negotiating the waves of economic change ahead, which will alter industrial makeup, as well as the size of firms.

While the United States will continue to make increasingly sophisticated products and retain a commanding share of world production, technology and organizational change are expected to enable dramatic advancements in productivity that will eliminate the need for many manufacturing jobs. Between 1994 and the year 2005, the Bureau of Labor Statistics (BLS) predicts that an estimated 1.3 million manufacturing jobs will be lost while the national share of output remains virtually unchanged. Manufacturing's overall share of jobs in the economy is predicted to decline from one in seven in 1994 to one in eight by the year 2005.²²

As a consequence, the very foundation of the development strategies on which we have historically relied is being systematically undermined. Gradually, jobs and opportunity in the manufacturing sector, where these efforts have largely been concentrated, are being pared away. In spite of recent growth in Kentucky's manufacturing sector and among small manufacturers nationally, long-range forecasts are for a decline in manufacturing jobs, as well as farm and mining employment, the historic cornerstones of the state's economy. Kentucky's Department for Employment Services in the Workforce Development Cabinet, for example, predicts that the occupational categories in which

TABLE 3
Projected Job Losses in Occupations with
Highest Losses, Kentucky, 1994-2005

Sewing Machine Operators, Garment	4,752
Farmers	4,695
Bank Tellers	1,775
Farm Workers, Excluding Ag. Services	1,748
Cleaners & Servants, Private Household	1,156
Typists, Including Word Processing	1,118
Bookkeeping, Accounting, Auditing Clerks	1,102
Mainframe Computer Operators, Ex. Peripheral Equip.	928

Source: Department for Employment Services, Kentucky Workforce Development Cabinet

the largest loss of jobs will occur between the years 1994 and 2005 are sewing machine operators (4,752 jobs) and farmers (4,695 jobs).²³ The occupational category of farm workers, which excludes the growing field of agricultural services, is predicted to experience the fourth highest rate of decline, losing nearly 1,775 jobs by 2005. Similarly, mining occupations represent eight of the 25 fastest declining occupations in the state.²⁴ Other declining occupations, including those of bank tellers, typists and bookkeepers, reflect the impact of advancing technology.

The nation, as well as Kentucky, is expected to broadly expand its internal capacity to meet the human needs of its own population, as well as serve those of the global community. Over the past five years, between 1991 and 1996, home health-care services nearly doubled in terms of job growth

²² Bureau of Labor Statistics (BLS), "New 1994-2005 Employment Projections" (News Release), U.S. Department of Labor 1 Dec. 1995.

²³ Kentucky Department for Employment Services, *Kentucky Occupational Outlook to 2005* (Frankfort: Kentucky Workforce Development Cabinet, 1997) 16.

²⁴ Employment Services 17.

(91 percent).²⁵ Between 1994 and 2005, BLS predicts that *health services, business services and social services will account for one of every two jobs added to the economy*.²⁶ Small entrepreneurial firms led by skilled professionals and paraprofessionals will respond to unmet needs in the economy.

In Kentucky, real employment growth is also expected to remain concentrated in the service sector, from health and human services, to high-end business, management, and computer and data processing services, to street-level restaurant and retail sales. As illustrated in Table 4, occupations in service industries such as health care, management and marketing are predicted to experience the highest rates of growth in Kentucky. The highest number of job openings for college educated workers in Kentucky will occur in the “general managers and top executives” occupational category (1,613), followed by registered nurses and elementary, secondary and special education teachers.²⁷ Topping the list of the most annual job openings for workers with a high school diploma and/or some postsecondary training are retail salespersons (2,247), general office clerks (1,096), waitresses and waiters (1,024), and nursing aides, orderlies and attendants (1,003).²⁸ Kentuckians without a high school diploma may find work as cashiers, janitors, fast food preparers, guards, or stock clerks, but employers will express a preference for high school graduates in these jobs.²⁹

Here, as around the nation, many are creating their own opportunities in the marketplace. Small business growth has come in response to structural economic shifts that have decentralized employment, outsourced specialized services and scattered millions of displaced workers and marketplace functions. The collective response to this reconfiguration of our economy has been one of extraordinary entrepreneurial energy. Capturing more of it here in the Commonwealth is central to the long-term health of Kentucky’s social and economic well-being. To do so, it will be necessary to modify and enhance development policy.

TABLE 4
The Fastest Growing Occupations in Kentucky
by Job Requirement, 1994-2005

Minimum Requirement/Occupation	Annual Job Openings
Bachelor's Degree	
General Managers & Top Executives	1,613
Registered Nurses	1,093
Teachers, Elementary	903
Teachers, Secondary	616
Teachers, Special Education	382
Extensive Postsecondary or Employer Training	
Marketing & Sales, Supervisors	879
Clerical Supervisors & Managers	694
Maintenance Repairers, General Utility	603
Other Sales Reps., Excluding Retail	571
Automotive Mechanics	527
High School Diploma and/or Some Postsecondary Training	
Salespersons, Retail	2,247
General Office Clerks	1,096
Waiters & Waitresses	1,024
Nursing Aides, Orderlies & Attendants	1,003
Secretaries, Except Legal & Medical	962
High School Diploma Preferred, Not Required	
Cashier	3,685
Janitors & Cleaners	1,182
Food Prep. & Service Workers, Fast Foods	871
Guards	643
Stock Clerks, Sales Floor	639

Source: Dept. for Employment Services, Kentucky Workforce Development Cabinet

²⁵ Friedman, E.M.

²⁶ BLS, “New . . .”

²⁷ Employment Services 8.

²⁸ Employment Services 12.

²⁹ Employment Services 14.

Entrepreneurial Benefits

Entrepreneurial development holds the possibility of a more promising future, one in which the energy of a dynamic economy becomes a magnet for people of all ages. Ironically, an entrepreneurial economy offers a bevy of positive, largely unique outcomes that often promote the recruitment of coveted high-performance organizations. The many potential short- and long-term benefits of recasting our development efforts in a far more entrepreneurial mode include:

- High-Value Jobs
- Greater Equity
- Innovation
- Economic Diversity
- Wealth Generation
- Radiating Economic and Social Entrepreneurship.

High-Value Jobs

The breadth of the population of working poor attests to the disturbing disconnection between full-time employment and prosperity. The number of jobs is less important than the quality and sustainability of jobs to the long-term economic health of families and communities. Today, small businesses are not only creating more jobs than larger firms, according to Cognetics, they're creating more high-wage jobs. From 1991 to 1996, Cognetics found that those firms with fewer than 100 employees created 9.3 million or 83.6 percent of the 11.2 million net new jobs. Of the total jobs created, 4.9 million were in high-wage firms paying an average wage of \$29,191; small firms created 4.2 million or 87 percent of those jobs.³⁰

Arguably, an entrepreneurial development strategy will help create more high-value jobs that are more likely to remain an integral part of Kentucky's economy and thus more likely to produce enduring benefits than the mobile firms that now garner much of the favor of our development policies. Firms conceived, created and owned by Kentuckians are far more likely to remain rooted in our economy and in our communities than firms that move with the winds of lower business costs. Rather than low-paying, marginal employment opportunities, the quality of new jobs in small firms in Kentucky nearly parallels those being created by most established businesses; only the state's largest firms pay significantly higher wages. And, as small firms stabilize, wages improve. John E. Jackson, a professor with the University of Michigan's Institute for Social Research, finds that small start-ups produce good jobs, the quality of which improves with the firm.³¹ Already, according to the U.S. Department of Commerce, even the tiniest and, in all likelihood, the most fragile of Kentucky's new firms pay an average wage comparable to the average for all firms in the state. While the average earnings at Kentucky firms employing fewer than five people was \$21,820, the average for all firms was only 2 percent higher at \$22,340.³² Figure 3 illustrates the wage differential for various sized firms in Kentucky. In terms of hourly wages, the Center's survey of Kentucky entrepreneurs found an average hourly wage of \$11.17,³³ certainly a respectable number.³⁴

³⁰ Mike McNamee, "Good News from Small Biz," *Business Week* 1 Sept. 1997: 24.

³¹ John E. Jackson, "Firm Size and the Dynamics in a Market Economy," University of Michigan Business School, Ann Arbor, Michigan, as cited by Karen E. Carney, "Registry: Who's Who in Small Business Research," *State of Small Business, 1995, Inc.* Online, Internet, 3 Oct. 1997.

³² U.S. Department of Commerce, *County Business Patterns, 1995*.

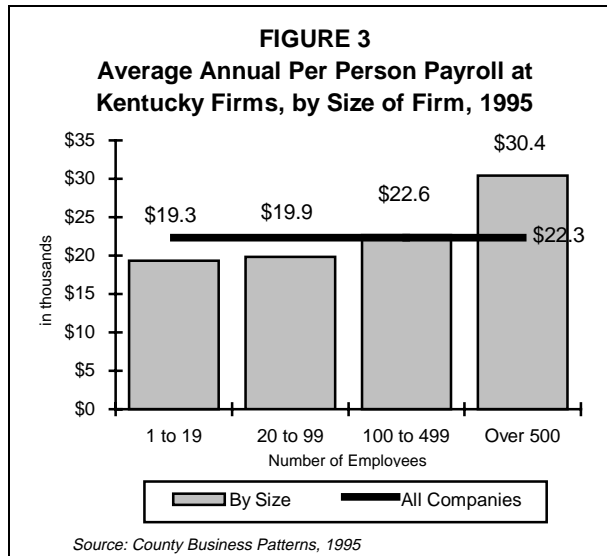
³³ The \$11.17 average is calculated from three questions from the Survey of Small Business Owners, (Q-34) *What is the*

A significant though predictable disparity exists between wages at the smallest and the largest firms in Kentucky. The state's large or "supersize" firms (500+ employees) provide high-quality jobs because they are outposts of established, mature corporations that have abundant resources with which to compete for the Commonwealth's most skilled workers. In many cases, veteran employees with significant tenure dominate the workforces of these firms. Many, including Ford, General Electric, Rohm & Haas, and Phillip Morris, are unionized facilities in which wage and benefit packages are the products of collective bargaining agreements.

Due to the diminished resources of smaller firms, a number of studies have found marked differences between the benefits received by employees of small and large establishments. For example, a 1994 study of Current Population Survey data by William J. Wiatrowski found that a smaller proportion of firms with fewer than 100 employees provide benefits of all types than larger establishments.³⁵ For example, employees of smaller firms paid higher deductibles and made larger monthly contributions to health care benefits. They were also slightly less likely to receive paid vacations and days of paid vacation compared less favorably as years of tenure accrued.³⁶ Similarly, a study of national survey data by Kathawala and Elmuti found that employee health care coverage clearly increases with the size of a firm *but* the cost to employers declines.³⁷ Consequently, to close national gaps in health care and pension benefits, public sector attention must be brought to ways of creating affordable alternatives for small firms and their employees.

Tables 5 and 6 illustrate employment levels and wages relative to firm size. While most industries show the predictable relationship between larger firms with more resources and higher wages, the industrial sectors where most small firms (61.9 percent of firms with fewer than 20 employees) are concentrated—services (36.1 percent) and retail trade (25.8 percent)—pay competitive wages within their industry. In the fast-growing services sector, establishments with fewer than 20 employees pay wages that are higher or competitive with those paid by the largest establishments. As shown, the average 1995 service industry wage in establishments with fewer than 20 employees (\$21,325), according to the Census Bureau, was 7.4 percent higher than the average for establishments of all sizes (\$19,851). Those establishments with 20 to 99 employees paid the highest wages.

Among establishments employing fewer than 20 people, about a quarter or 25.8 percent are in



average hourly wage for employees of your firm in the following categories? The three categories are PROFESSIONAL/TECHNICAL, PRODUCTION, and OTHER WORKERS. The average wage for all workers is obtained by multiplying the mean wage for each category times the sample size, summing the products, and then dividing by the total sample size. In other words (or as the case may be, numbers), $\$11.17 = ((201 \times \$17.24) + (148 \times \$9.24) + (242 \times \$7.32)) / 591$.

³⁴ According to the Bureau of Labor Statistics, earnings of production or nonsupervisory workers in Kentucky during May 1997 for all manufacturing workers was \$13.22. The range is \$7.77 in the apparel industry to \$21.54 in motor vehicles.

³⁵ William J. Wiatrowski, "Small Businesses and Their Employees," *Monthly Labor Review* Oct. 1994: 29.

³⁶ Wiatrowski.

³⁷ Yunus Kathawala and Dean Elmuti, "An Empirical Investigation of Health Care Coverage and Costs in U.S. Small Businesses," *Journal of Small Business Management* Oct. 1994: 61.

TABLE 5
Kentucky Establishments by Industry Group, 1995

	Total Firms		No. of Firms by No. of Employees			Percent of Firms	
	All Sizes	<20 Employees	1-4	5-9	10-19	All Sizes	<20 Employees
Agricultural Services	1,247	1,191	803	264	124	95.5	1.6
Mining	886	562	317	103	142	63.4	0.8
Construction	8,395	7,608	5,076	1,623	909	90.6	10.5
Manufacturing	4,532	2,670	1,330	639	701	58.9	3.7
Transportation	4,368	3,649	2,320	807	522	83.5	5.1
Wholesale	6,147	5,210	2,737	1,429	1,044	84.8	7.2
Retail Trade	22,468	18,636	9,722	5,262	3,652	82.9	25.8
Finance, Insurance & Real Estate	7,215	6,616	4,389	1,557	670	91.7	9.2
Services	29,173	26,094	16,928	5,836	3,330	89.4	36.1
TOTAL	84,431	72,236	43,622	17,520	11,094	NA	100.0

Source: County Business Patterns, Kentucky, 1995

retail trade. Wages in this high employment growth industry lag well behind those of other industries, regardless of establishment size. However, the smallest of these establishments, those employing fewer than 20 people, pay wages that, on average, exceed the average for establishments of all sizes. Wages in the largest retail establishments, those employing 100 to 499 people, exceed those in the smallest establishments by only 6 percent on average. It is worth noting that only 55 of Kentucky's 22,468 retail establishments employ 250 or more people and only 350 establishments employ between 100 and 249 people. As in every major industry group, the majority of retail establishments in Kentucky—18,636 or 82.9 percent—employ fewer than 20 people.

Nearly one fifth of establishments with fewer than 20 employees are in the construction (10.5 percent) and the finance, insurance and real estate (9.2 percent) industry groups. Here, more signifi-

TABLE 6
Annual Pay Per Employee by Establishment Size and Industry
Kentucky, 1995

	Number of Employees				Average Pay All Sizes
	1-19	20-99	100-499	500+	
Agricultural Services	\$15,519	\$17,288	NA	NA	\$17,407
Mining	\$33,708	\$31,029	\$40,397	NA	\$36,244
Construction	\$19,562	\$26,518	\$32,686	NA	\$23,878
Manufacturing	\$22,272	\$25,381	\$27,648	\$35,235	\$29,768
Transportation	\$22,631	\$28,219	\$35,044	\$35,192	\$30,704
Wholesale	\$25,573	\$26,759	\$36,279	NA	\$27,315
Retail Trade	\$12,730	\$11,211	\$13,488	NA	\$12,262
Finance, Insurance & Real Estate	\$23,870	\$29,038	\$33,212	\$31,129	\$27,117
Services	\$21,325	\$29,598	\$15,949	\$23,298	\$19,851

Source: County Business Patterns, Kentucky, 1995

cant wage disparities between smaller and larger establishments are evident. Again, however, it is worth noting that the overwhelming majority of firms (90.6 percent of construction establishments and 91.7 percent of establishments in the finance, insurance and real estate business) in Kentucky in both these major industry groups employ fewer than 20 people. Firms of this size have their smallest presence in the manufacturing sector (4,532 firms) where they still comprise the majority (58.9 percent) of all establishments.

While these data confirm the correlation between large, established firms and higher wages, the ascendance of lower wage industries, namely services and retail, has been clearly established. Indeed, the highest pay for industries of all sizes in 1995 was found in the mining industry where employment declined 44 percent between 1987 and 1996, according to the Department for Employment Services. Fewer than 20,000 Kentuckians were employed in mining in 1996. Steady declines in employment are also anticipated in manufacturing. Because small firms in Kentucky dominate each

major industry group and lower wage industries are providing jobs for more and more Kentuckians, the importance of strengthening small firms with high-wage potential and facilitating their growth cannot be overstated. Nor can the importance of increasing the capabilities of Kentucky's workforce. With the presence of higher skills in a more entrepreneurial environment, more high-wage firms can be expected to emerge.

Greater Equity

A development strategy that offers opportunity to everyone, instead of linking it to the location decisions of outside firms, is far more likely to distribute its benefits more equitably. An entrepreneurial approach to raising quality of life and personal income in Kentucky would channel public resources to communities and individuals that need them, rather than to mobile industries that pit states against one another in a bid for long-term tax relief. This deferral of public resources and the public good they might achieve over the long run effectively compromises the state's ability to fashion its own remedies for unique underlying economic and social problems.

Alternatively, through services and support aimed at Kentucky entrepreneurs, the state can effectively democratize economic development and enable people from all regions and all economic circumstances to participate more fully in its development. Indeed, research shows that commitment to place—a Kentucky tradition—is a strong determinant of small business development. In a study of 1,200 business owners, Paul D. Reynolds of Babson College in Wellesley, Massachusetts, found that people who started businesses had lived in an area for five to ten years prior to starting their businesses.³⁸ And, importantly for Kentucky's rural areas, which continue to lose young, more educated residents, most were high-school graduates but not necessarily college graduates.³⁹ Similarly, Reynolds finds that most entrepreneurs (90 percent) live in a state for six years before incorporating there.⁴⁰ Because knowledge of an area may be key to business formation, strong entrepreneurial development strategies could encourage many Kentuckians, including those seeking to return to their home state, to launch new enterprises here.

If, as Peter Drucker, Jeffry Timmons and myriad others assert, entrepreneurs are made not born, promoting entrepreneurial development could yield benefits in areas that have historically had difficulty attracting jobs from the outside.⁴¹ As University of Michigan Professor John E. Jackson has found in his studies of Michigan's transition from a dominant-industry manufacturing economy, policies that stimulate new enterprise development and productivity are far more effective than subsidies to struggling industries.⁴² And industries that make location decisions based on low wages and low business costs are often struggling. Though an entrepreneurial strategy requires investments in human capital and community infrastructure, it offers an opportunity for a fairer and a more enduring return on investment—a populace that thinks and acts innovatively.

At the community level, the cultivation of small firms and microenterprises, those employing fewer than five people, offers enormous potential. In an analysis of the characteristics of the nation's most magnetic small towns, sociologists Michael Irwin, Charles Tolbert and Thomas Lyson found that a common and apparently essential ingredient is a diverse base of small businesses. These firms, including small manufacturers, the authors conclude, anchor people to place and engage them in the

³⁸ Stern.

³⁹ Stern.

⁴⁰ Paul D. Reynolds, "Local and Regional Characteristics Affecting Small Business Formation: A Cross-National Comparison," Organization for Economic Cooperation and Development, 1993, as cited by Carney.

⁴¹ This is not to suggest that each region is at an equivalent stage of entrepreneurial evolution or readiness, but that an equitable, region-specific approach can facilitate the development of entrepreneurship.

⁴² John E. Jackson, "Seeing the Trees Through the Forest: The Changing Michigan Economy, 1978-1988," University of Michigan Business School, 1991, as cited by Carney.

civic life of their communities.⁴³ Because of their investment in communities, small firms are often less likely to leave during economic downturns. Even retail establishments, these researchers conclude, can play an instrumental role in creating public spaces where people interact and civic life flourishes.⁴⁴ They recommend that strategies for increasing long-term residents and stemming out migration include the cultivation and development of small businesses.

At present, the communities of the Commonwealth where need is most acute and where the fruits of development would make the most pronounced difference in income and quality of life are perhaps the least likely to enjoy the benefits of the state's principal economic development strategy. The Berea-based nonprofit Mountain Association for Community Economic Development (MACED) recently identified critical barriers to the successful implementation of the Economic Development Cabinet's industrial recruitment strategy in the 49 Appalachian counties it represents in eastern Kentucky. They include economic decline, a shortage of human capital, divided communities and environmental degradation.⁴⁵ Without substantial investment in human and physical capital, MACED concludes that efforts to recruit industry to eastern Kentucky will continue to be largely unsuccessful. Clearly, many rural communities throughout the state have yet to benefit from industrial recruitment initiatives.

Alternatively, a capacity-building strategy that focuses principally, though not exclusively, on development from within offers communities with structural deficiencies an opportunity to participate fully in the expansion of opportunity.

Innovation

Entrepreneurial firms offer our economy more potential for innovation than large established ones. To begin with, their perspective differs. Entrepreneurial firms have the potential to create or capture an entire industry while large established firms are often predisposed to protect their market share. In addition to financial rewards, the desire for independence, recognition and an outlet for creativity motivates entrepreneurs. Major obstacles do not easily thwart dedicated entrepreneurs. In complex organizations, on the other hand, "The overriding obstacle often is maintaining an adequate commitment to a new idea in the face of internal obstacles to change. There is an understandable reluctance to depart from what has been a successful pattern of business."⁴⁶

Noted entrepreneurial researcher Zoltan J. Acs, who founded the journal *Small Business Economics*, found that, even in industries dominated by large firms, small firms are the source of most innovations, including the organization and application of technology.⁴⁷ Likewise, based on numerous studies, the Small Business Administration finds that:

- *Small firms produce 55 percent of innovations.*
- *Small firms obtain more patents per sales dollar, even though large firms are more likely to patent a discovery, implying that small firms have more discoveries.*
- *Small research and development (R&D) firms have higher percentages of R&D scientists and engineers than large firms, 6.41 percent versus 4.05 percent.*
- *Small firms receive only 11 percent of their R&D funds from the federal government, compared to the 26 percent large firms receive.*

⁴³ Michael Irwin, Charles Tolbert, and Thomas Lyson, "How to Build Strong Home Towns," *American Demographics* Feb. 1997: 43-47.

⁴⁴ Irwin et al.

⁴⁵ Mountain Association for Community Economic Development (MACED), "Sustainable Communities Initiative" (grant proposal) 1996.

⁴⁶ U.S. Panel on Invention and Innovation, as cited by USSBA, *The State of Small Business*, 111-112.

⁴⁷ Zoltan J. Acs, *Innovation and Small Firms* (Cambridge, MA: MIT Press, 1990).

- *A federal dollar to small firms is more than four times as likely to be used for basic research as a federal dollar to a large firm.*⁴⁸

Kressel and Guile argue that the role of small firms in the larger economy is one of breaking new ground and taking the risks large firms are unwilling to assume. “The substantial benefits of small-business risk taking—the rapid exploration of new market possibilities, the development and refinement of new products and services, certain types of technical innovation, and product diversity—accrue to individual consumers, to other companies and to the national economy.”⁴⁹ They cite the video rental business, which emerged from a small business venture, as an example of the potential of small business innovations. In this case, small businesses took the initial risk, established a new market, paved the way for larger firms while enabling small owners to accumulate profits, and created a web of market reactions, including an explosion of VCR sales that ultimately drove prices down and thus broadly benefited consumers.

“Innovation,” Peter Drucker suggests, “is the act that endows resources with a new capacity to create wealth. Innovation, indeed, creates a resource. There is no such thing as a resource until man finds a use for something in nature and thus endows it with economic value. Until then, every plant is a weed and every mineral just another rock.”⁵⁰ As Drucker eloquently observes, innovation is the transformation of ideas into tangible products and services, into new resources that satisfy an unmet need or meet a need in a superior way. The benefits of small firm innovation in the development of new types of businesses, new products, and new markets are catalytic. One need only consider a sample of 20th century small business innovations to sense the potential for returns on new products. The Small Business Administration cites the airplane, the personal computer, optical scanners, soft contact lenses, heart pacemakers and zippers as only a few examples of small business innovations,⁵¹ each of which has produced incalculable economic and social effects and benefits.

Just as high-performance workplace systems enable enterprises to capture more of the transformational potential of innovation through employee training and empowerment, the conscious cultivation of an entrepreneurial approach to development facilitates innovation and, therefore, offers the possibility of exponential reward. Indeed, the ability of U.S. firms to remain competitive in industries that would otherwise be drawn to cheaper labor is widely credited to innovation. Just as large firms are able to manage and adjust to market fluctuations, changing demand and economic downturns, entrepreneurial economies are more resilient because innovative energy flows more freely. Ultimately, the relative health of an enterprise or an economy is a product of its internal capacity to see and shape opportunity in a changing context.

Ultimately, the relative health of an enterprise or an economy is a product of its internal capacity to see and shape opportunity in a changing context.

Significantly, the advantages entrepreneurs possess translate into results. In a study conducted for the SBA, small firms were estimated to be responsible for 55 percent of 8,074 innovations in 362 industries identified in a collection of technology, engineering, and trade journals.⁵² New firms, in particular, were found to have made a significant contribution to the commercialization of new technologies. The study also revealed that small entrepre-

⁴⁸ USSBA, “Facts . . .”

⁴⁹ Krellel and Guile 28.

⁵⁰ Drucker, *Innovation* 30.

⁵¹ USSBA, “Facts . . .”

⁵² USSBA, *The State of Small Business: A Report to the President* (Washington: Government Printing Office, 1997).

neural firms produced more than twice as many product innovations per employee as their larger counterparts,⁵³ and nearly twice as many significant innovations per employee.⁵⁴

Innovation ranks high among the desirable characteristics of any state's economy and constitutes a potential void in our own. As economist Joseph Schumpeter noted more than 50 years ago, "It isn't price competition but new technologies, new products, and new forms of organization that lead to decisive cost or quality advantages."⁵⁵ Overall, technological innovations and their diffusion are credited with about 30 percent of the growth in the U.S. gross domestic product from 1947 to 1992.⁵⁶ Conversely, an economy that does not enable innovation or entrepreneurship cannot expect growth to meet or exceed expectations.

Economic Diversity

Adam Smith noted over two centuries ago that a regional or local economy is healthier if it is fueled by 20 firms with 100 employees each, rather than two firms with 1,000 employees each. "The real wealth of nations," he observed, "comes not from the size of the firms but from their numbers."⁵⁷ The truth of Smith's words resonates in today's advanced economy just as it did during the founding years of our nation. In particular, small entrepreneurial firms tend to create diversity and competition, whereas large firms tend to stifle these forces and link whole networks of businesses and industries to the production strategy and the economic health of a single enterprise. As a consequence, whole networks of businesses rise and fall with the fortunes of a single firm. Witness the economic devastation of communities that have lost thousands of garment manufacturing jobs in our state. By contrast, diversity reduces the vulnerability of a state or local economy to unforeseen events and helps moderate the effects of the inevitable economic downturn.

Importantly, one of the brightest spots in Kentucky's economy lies in its relative diversity and the range of opportunity that diversity can enable, given the appropriate support. The Corporation for Enterprise Development continued to give the Commonwealth top marks ("A") for the diversity of its economy in 1996, but the state fell from fourth in the nation in 1995 to 10th in 1996. Nevertheless, the strength of this diversity continues to present opportunity for expansion and improved economic performance. In effect, the economic activity already present in the state offers a broad foundation for growth and development and a level of diversity sufficient to withstand economic downturns. If matched with a strong commitment to the cultivation of entrepreneurial capacity, exponential growth could conceivably result.

Wealth Creation

The wealth generated by a particular business is nearly impossible to measure. As we noted in the discussion of innovation, the products of small business innovation have a broad and enduring impact that is incalculable in its scope. Nevertheless, when companies are sold or taken public, it is

⁵³ By comparing total employment in the 362 industries of the innovating enterprises with the total number of innovations, the SBA study found 2.38 times as many innovations per employee in small entrepreneurial firms as in established firms. A previous study had estimated a ratio of 2.45 for a smaller group of 635 innovations in the 1970s.

⁵⁴ The SBA innovations were assigned a level of significance: (1) first of its type, (2) a significant improvement of existing technology, or (3) a modest improvement of an existing product. Small firms were found to produce 1.91 times as many first-of-type innovations, 1.92 times as many significant improvements, and 2.46 times as many modest improvements per employee as large firms.

⁵⁵ Zoltan J. Acs, "Where New Things Come From," *Inc.* May 1994: 29.

⁵⁶ USSBA, *State of Small Business*.

⁵⁷ J.S. Luke, C. Ventriss, B.J. Reed and C.M. Reed, *Managing Economic Development* (San Francisco: Jossey-Bass, 1988) 74.

possible to glimpse some rather telling numbers. For instance, a report by the Louisville Area Chamber of Commerce, *Growing Success*, notes that several Louisville-based entrepreneurial companies started in the 1980s, including Healthcare Recoveries, CompDent, The Cobb Group, Home Care Affiliates, and Financial Alliance, were sold for an aggregate price of over \$200 million in the 1990s.⁵⁸ Much of this wealth remains in Louisville, where a portion of it is being reinvested in new growth companies. Moreover, many of these firms remain an integral part of the state's economy, contributing jobs, competitive energy, and tax revenue, as well as needed products and services.

Entrepreneurship also creates wealth for a state by expanding the tax base on two levels. Each net new job provides a new taxpayer, as does each net new business entity. This particular aspect of entrepreneurial development offers what is perhaps one of its most distinct differences from traditional recruitment strategies. Under "supply-side" policies that emphasize responding to the demands of mobile industries, states have no guarantee that successfully recruited firms will remain long enough for the state to recoup its investments, which often take the form of site or human resource development, extensive tax relief, or both. Not only do homegrown firms (and their profits) tend to stay in the communities in which they originate, but also the return on entrepreneurial investment is easier to gauge.

Radiating Economic and Social Entrepreneurship

One of the most desirable traits of entrepreneurs is their ability to generate excitement and inspire others to join their ranks, to act with daring and tenacity, whether they are launching a new business or tackling a social problem. Indeed, social or civic entrepreneurs, as evidenced by a burgeoning nonprofit sector, have become as important to the well-being of our state and our nation as those who form new businesses, create employment opportunities, and help generate wealth. With the federal government's retrenchment from social spending has come a vibrant new grassroots movement that is aiming considerable energy and resources, thanks to increasing foundation wealth, at all manner of social problems and public policy challenges. Just as these entities are generating vital social capital in communities around the Commonwealth, entrepreneurs are paving the way for the next generation of business owners. And, in addition to their social contribution to the state, nonprofits are creating jobs whose express mission is often that of expanding economic opportunity for others.

Teaching a populace to think and act entrepreneurially promotes efficiency, creativity and innovation in arenas outside the business world.

In short, the success of today's entrepreneurs inspires the aspiring. The simple presence of role models, many of whom serve as informal mentors, provides powerful encouragement to would-be entrepreneurs, reinforcing the potential for reward, despite early-stage fears and struggles. Research into the entrepreneurial process by Jeffrey Timmons, a professor of entrepreneurship at the Harvard Business School, confirms the notion that communities with an abundance of entrepreneurial companies often propagate even more entrepreneurs. According to Timmons, "Numerous studies show a strong connection between the presence of role models and the emergence of entrepreneurs."⁵⁹ Entrepreneurial companies provide an important training ground for future entrepreneurs. Many of them apprentice with entrepreneurial companies before embarking on their own ventures. As Tim-

⁵⁸ Louisville Area Chamber of Commerce, *Growing Success: A Report on Entrepreneurship in Louisville* (Louisville: Author, 1996) 4.

⁵⁹ Jeffrey A. Timmons, *New Venture Creation: Entrepreneurship in the 1990s*, 3rd Edition (Chicago: Irwin, 1990) 24.

mons notes, “Most entrepreneurs follow a pattern of apprenticeship, where they gain business experience and knowledge from either their jobs or from parents who are self-employed.”⁶⁰

Family role models appear to play an important role for both civic and business entrepreneurs. Certainly, a culture that values reciprocity is more likely to foster continued traditions of giving in the interest of the common good.⁶¹ Likewise, research, including the work of the Kentucky Long-Term Policy Research Center, suggests that a family background in business ownership influences the decision to become a business owner.⁶² Syracuse University economists Thomas A. Dunn and Douglas Holtz-Eakin, for example, traced outcomes for a group of young men from the 1960s to the 1980s. Predictably, parental and personal wealth had a statistically significant effect on whether these young men became self-employed. But the effect was a modest one. Instead, the occupation of parents in the study group was a far more significant determinant. Sons of self-employed parents, particularly fathers, were far more likely to become self-employed.⁶³ Similar findings emerged from a study of business administration students by Charles H. Matthews and Steven B. Moser, which found that, at particular ages in life, family backgrounds in small business are associated with the increased likelihood that an individual will be interested in becoming an entrepreneur.⁶⁴ Because parental example is such an important factor in motivating entrepreneurship, it underscores the importance of cultivating future role models now.

Thriving entrepreneurs have also proven to be an important source of risk capital for new ventures. William Wetzel, the oft-cited professor emeritus of management at the University of New Hampshire and director emeritus of the Center for Venture Research, reports that about three quarters of “business angels” are self-made millionaires, many of whom were entrepreneurs themselves. These angels invest between \$10 billion and \$20 billion a year in an estimated 30,000 or more ventures⁶⁵—far exceeding investments by the professional venture capital market, which invested some \$3.1 billion in about 2,400 firms, and less than \$1 billion in early stage companies in 1995.⁶⁶

Teaching a populace to think and act entrepreneurially promotes efficiency, creativity and innovation in arenas outside the business world. Moreover, as the achievements of entrepreneurs gain recognition, young people not only begin to recognize and appreciate what it takes to make businesses succeed, but also and perhaps more importantly, they begin to see possibilities. Entrepreneurial qualities are also highly regarded by organizations that depend on an empowered workforce to innovate and invest their establishments with an entrepreneurial spirit. By successfully introducing and advancing these qualities in our culture, the state could promote a more dynamic, energetic image of possibilities, rather than one of limitations.

⁶⁰ Jeffrey A. Timmons, “The Entrepreneurial Mind,” *Success* April 1994: 48.

⁶¹ Robert D. Putnam, *Making Democracy Work: Civic Traditions in Modern Italy* (Princeton: Princeton University Press, 1993).

⁶² These results are discussed in more detail in the next chapter, “Who Are Kentucky’s Entrepreneurs?”

⁶³ Gene Koretz, “What Makes an Entrepreneur,” *Business Week* 9 Dec. 1997: 32.

⁶⁴ Charles H. Matthews and Steven B. Moser, “A Longitudinal Investigation of the Impact of Family Background and Gender on Interest in Small Firm Ownership,” *Journal of Small Business Management* 34.2 (1994): 29-44.

⁶⁵ Wetzel 38-39.

⁶⁶ Price Waterhouse LLP, “Price Waterhouse National Venture Capital Survey: Selected Findings for the Southern Growth Policies Board,” Atlanta, GA, 20 June 1996.

New Directions for Development Policy

In his 1988 book, *The Rise of the Entrepreneurial State*, Peter K. Eisinger argued that state and local economic development policies were shifting away from a nearly exclusive past focus on externally oriented “supply-side” policies designed to meet the demands of mobile industries. The success of these policies hinged on the decision of outside firms. Eisinger saw it being replaced by a “mastery of demand factors,”⁶⁷ the internal qualities that enable states or communities to compete in today’s marketplace. This new develop-from-within sensibility, Eisinger concluded, was emerging in response to diminishing returns from industrial recruitment, the strategies of which were quickly being appropriated by other states and locales; to declining federal aid; and, perhaps most importantly, to structural changes in the larger economy. Globalization of the economy was compelling an altogether different approach to development, one that would facilitate capital formation and wealth generation far more effectively than its predecessors.

Marketing flawed products—poorly educated workforces in regions with high unemployment rates—to mobile industries has not and will not likely create sustainable wealth.

These entrepreneurial approaches to development were not unlike the organizational change underway in American workplaces. The complacent, production-first mentality that U.S. dominance of the world marketplace had fostered was being supplanted by a new emphasis on process, on the organization of work to enable continuous improvement of product quality. States, like enterprises faced with new competitive pressures, were coming to see that the quality of the products of public institutions—from effective public schools, to skilled workforces, to entrepreneurial assistance—mattered far more than the quantity of jobs incentive programs managed to snare. Marketing flawed products—poorly educated workforces in regions with high unemployment rates—to locating industries simply did not create sustainable wealth. Instead, mobile industries continued their pursuit of cheaper labor.

Eisinger’s assessment of new approaches to development in the late 1980s also recognized the political realities public officials confronted then as they do now. Once altogether absent from the platter of state responsibilities, economic development began making its way to the top of the public agenda in the mid-1970s,⁶⁸ as the effects of global competition began to take hold. As a consequence, “jobs, jobs, jobs” became the political mantra of most aspiring politicians, even as the quality of millions of jobs began to erode and employment no longer meant opportunity. State officials responded to rising constituent pressure with a volley of industrial incentive packages aimed at luring industries to their state or locale by foregoing tax revenue. Only in recent years has the public demand for “quality jobs” begun to eclipse the far less complicated plea for jobs.

In spite of changing employment patterns, a growing population of working poor, the poor quality jobs many incentive packages have netted, and mounting criticism of the cost of incentives, the lure of the big fish remains irresistible. After all, Toyota alone has proven the worth of strategic recruitment of high-wage industries. And the long-term efforts needed to build more entrepreneurial economies at the local level will not produce immediate, politically gratifying results. Over time, however, these efforts are likely to produce far more diversified and thus more resilient economies, a particularly important goal for an essentially rural state. Arguably, efforts to build a

⁶⁷ Peter K. Eisinger, *The Rise of the Entrepreneurial State* (Madison: University of Wisconsin Press, 1988) 10.

⁶⁸ Eisinger 20-21.

more entrepreneurial economy are also likely to create more of the wealth political leaders have pursued throughout much of this century. Instead of amassing profits for distant parent companies, locally owned businesses generate wealth that is more likely to be invested in, rather than merely circulated in local economies. In short, an economy fueled by people with strong attachments to the Commonwealth will generate far more enduring prosperity than one that relies too heavily upon locating industries that too often seek to exploit our weaknesses.

As we have argued in past reports, strategic industrial recruitment that seeks to correct market deficiencies can play a key role in the development of Kentucky's economy. But it should not be mistaken for the only role. Indeed, facilitating the growth and development of small businesses and enabling the emergence of entrepreneurs must assume equal importance in our economic policy framework. The fount of economic energy they already bring to our economy is perhaps the most undervalued resource in the state.

By relying too heavily on industrial recruitment today, we may place the very public goods small firms need—education, job training, infrastructure and support services—at risk over the long term.

In addition to the marketplace, the political context is changing dramatically. Citizen demands for higher levels of accountability that industrial incentives cannot readily offer are becoming increasingly aggressive. Moreover, public sentiment against the recipients of industrial incentives, often the very firms that have displaced workers, is likely to continue mounting unless globalization yields broad-

based benefits. So too will pressure for investment in people, in resources to assist them with the often painful adjustment that globalization is demanding. Ultimately, formidable organized political responses may emerge. One national union of public employees (AFSCME) has already come out in opposition to industrial recruitment incentives. An economic downturn could propel opponents to the forefront.

Already, significant formal opposition has emerged. The Ohio Senate, for example, unanimously passed a resolution in May 1996 calling for federal intervention to stop competition between states.⁶⁹ Further, officials of the Minneapolis Federal Reserve Bank argued in 1995 that Congress should end state recruitment incentives under the sweeping provisions of the Commerce Clause of the Constitution. Tax incentives, they argued, are a form of interstate competition that extends preferential treatment to certain firms and thus undermines the overall economy, misallocates resources and, ultimately, results in too few public goods.⁷⁰ And the real engines of today's economy, small and mid-size firms, argues urban economist David Friedman, need these public goods far more than large firms. By relying too heavily on industrial incentives today, we may place the very public goods small firms need—education, job training, infrastructure and support services—at risk over the long term.⁷¹

Now, welfare reform poses yet another challenge for policymakers who, in the coming months and years, must enable the employment of thousands of former recipients without undermining the local economies of this predominantly rural state. As rural researchers have observed, all citizens, urban and rural, have an important stake in the economic health of rural communities. The concentration of population in urban areas frequently results in unmanageable social and

⁶⁹ Charles Mahtesian, "Saving the States from Each Other," *Governing* Nov. 1996: 15.

⁷⁰ Melvin L. Burstein and Arthur J. Rolnick, "Congress Should End the Economic War Among the States," *1994 Annual Report of the Federal Reserve Bank of Minneapolis* March 1995, online, Internet (available at: <http://woodrow.mpls.frb.fed.us/pubs/ar/ar1994.htm>).

⁷¹ David Friedman, "The New Civil War," *State of Small Business 1996* (Special Issue of *Inc.*) June 1996: 98, online, *Inc. Magazine Archives*, Internet (available at: <http://www.inc.com>).

economic problems for cities that a more widely dispersed population effectively counters.⁷² Salant and Marx emphasize the importance of counteracting the concentration of economic activity in urban areas with collaborative efforts that unite firms and communities on a regional basis.⁷³ Indeed, locally based, entrepreneurial approaches to jobs creation and business development may offer a viable long-term strategy for welfare reform, one that will cause less disruption in local economies and diminish the need for relocation.

Small businesses are likely to be important players in the employment of former welfare recipients, just as they are for workers in general. While many of the high-growth companies that are dominating our present fast-paced national economy are high-technology firms that value brains above all else, microbusiness owners need not be highly educated or highly skilled. Indeed, the rising demand for personal services created by time-starved consumers has opened a window of opportunity. From manicurists to caterers, from gardeners to maids and nannies, a strong market exists for services that do not require extensive education and training. Extending a measure of business acumen, fair access to credit and critical benefits to this pool of potential microentrepreneurs will be key to enabling some present recipients of welfare and working poor Kentuckians to prosper in the emerging economy.

While unilateral withdrawal from interstate competition for industrial locations remains almost unthinkable to most political leaders, the evidence strongly suggests that significant modification of current strategies is in order. As Salant and Marx note, "Government at all levels should rethink public policies that subsidize and encourage low-wage industries, especially when these industries perpetuate poverty and damage the environment."⁷⁴ The General Assembly's modifications of generous incentive provisions in recent years clearly recognize the long-term implications of foregoing much-needed tax revenue. Moreover, the Economic Development Cabinet's central recognition of the importance of development from within in its strategic plan for the future signals understanding of the changing economic context. But this expressed commitment must be matched with the resources to expand and strengthen the efficacy of more entrepreneurial approaches. Indeed, more resources will be needed *at the local level* to develop small business and enable entrepreneurial opportunities.

In short, our "bird in the hand," the small firms that are already the backbone of Kentucky's economy and the unrealized entrepreneurial potential of our state, surely deserve a commitment of resources and energy equal to what we now extend to outside firms.

⁷² Thomas W. Bonnett, *Strategies for Rural Competitiveness* (Washington: Council of Governor's Policy Advisors, National Governor's Association, 1993).

⁷³ Priscilla Salant and Julie Marx, *Small Towns, Big Picture* (Washington: The Aspen Institute Rural Economic Policy Program, 1995).

⁷⁴ Salant and Marx 14-15.

Conclusion

The vision of an entrepreneurial state challenges us first to imagine and then methodically construct a changed economic and social context in the Commonwealth, one in which the energy and spirit of enterprise development permeates our culture. While realizing this vision will clearly require sustained commitment and resources, strong evidence suggests the ultimate outcomes of such a transformational strategy could be dramatic. Additionally, they would, in all likelihood, be far more sustainable than the often-transient benefits of industrial recruitment strategies. Our vision of an entrepreneurial Commonwealth is one of a state that is home to ever-expanding possibilities, evidenced by strengths such as:

- A robust stream of geographically dispersed entrepreneurs to absorb an ever-expanding and increasingly qualified workforce;
- A large community of innovative companies in a perpetual quest to expand existing technologies and, in doing so, drive growth;
- Significant tax revenues that afford a generous return on investment and permit expanded investment in the cornerstones of the future;
- A flood of technology transfers and entrepreneurial spin-offs that contribute to an increasingly competitive marketplace, one that continuously creates new opportunities and broad benefits to consumers;
- High levels of civic entrepreneurship that enable an improved quality of life through contributions to the public good; and,
- An image attractive to high-performance organizations that locate here and lend further strength to an already dynamic economy.

Through a development strategy that centers principally on cultivating the internal capacity for entrepreneurship, Kentucky can effectively capture more of the catalytic energy needed to build its economy from within. That energy, in turn, will make the state more attractive to individuals, investors and innovative firms. Our historic dependence on mobile industries and mobile capital has yet to achieve dramatic change in the circumstances of the lives of Kentuckians. Instead, income gains have been incremental at best and insufficient to withstand the vagaries of the larger economy. Indeed, the economic status of whole regions has not changed significantly over the course of decades. In order to achieve change in the economic circumstances of the lives of more Kentuckians, our strategy for development must focus far more acutely on enabling and empowering communities and citizens to seize opportunity—rather than wait for it to arrive.

Who Are Kentucky's Entrepreneurs?

Having explored the role that entrepreneurship is playing in the national economy and the potential benefits of this economic engine, we turn to a profile of Kentucky entrepreneurs. From our base of information about Kentuckians who have launched enterprises, we can learn more about the entrepreneurial process, how it can be better supported and what the policy implications of such support are. In turn, our approach to development can be refined to garner more positive outcomes for the state's economy.

Here we offer a geographic and demographic profile of Kentucky small business owners that includes: (1) the regional distribution of entrepreneurship in the state; (2) the educational status of Kentucky entrepreneurs; (3) their income history; and (4) factors that influenced their chosen path. The "typical" Kentucky entrepreneur is a white male, around 45 years old,⁷⁵ of above average education and income, who has started more than one business, lives in the state's urban triangle, and comes from an entrepreneurial family. While this profile is the predictable outcome of the state's relative lack of diversity, it nevertheless illustrates the need to broaden our entrepreneurial base from the predictable pool to a potential wellspring of entrepreneurial capacity. It also underscores the importance of cultivating entrepreneurs now in order to influence and encourage future generations and of placing special emphasis on rural areas where development from within could provide an antidote to poverty and underemployment.

While men are "almost twice as entrepreneurial as women"⁷⁶ and far more likely to have started or considered starting a business,⁷⁷ a growing number of new business owners are women, minorities and young people, those who have fared poorest in the U.S. economy. In 1995, women owned an estimated 7.7 million U.S. businesses that have proven remarkably durable. They employ 15.5 million people, about 35 percent more than the nation's Fortune 500 firms.⁷⁸ While a significant male-female disparity in business ownership persists in Kentucky, women have made gains in recent years. Between 1987 and 1992, the most recent data available, women-owned Kentucky firms increased 39 percent to a total of 74,280.⁷⁹ Similarly, minority-owned Kentucky firms made significant gains: black-owned firms increased 36.4 percent, to a total of 5,097 firms; Hispanic-owned firms rose 110 percent to 752; and businesses owned by Asians and Pacific Islanders, American Indians, and Alaskans also made gains, increasing 79.5 percent to 1,614 firms.⁸⁰

Also prominent among the ranks of entrepreneurs are young people, many of whom have watched their parents' once secure jobs disappear and who thrive on a "no fear" culture. A recent national study of 1,200 business owners found the highest percentage of start-ups among individuals

⁷⁵ This is their current age, not their age when they started their business(es). Other research has found that entrepreneurs tend to start businesses between the ages of 25 and 40. See Campbell as cited by the Louisville Area Chamber of Commerce, 1996, 10.

⁷⁶ Friedman, E.M.

⁷⁷ Michael Hopkins and Jeffrey L. Seglin, "Americans @ Work," *State of Small Business 1997 (Inc.)* 77.

⁷⁸ Sharon Nulton, "On Board for the Long Haul," *Nation's Business* Oct. 1995: 55.

⁷⁹ USSBA, "1996 Small Business Profile—Kentucky," online, SBA Online, Internet (at: <http://www.sbaonline.sba.gov>).

⁸⁰ USSBA, "1996 Profile."

25 to 35 years old.⁸¹ That Kentucky's entrepreneurs are typically middle-aged partly reflects the state's depleted youth population, but it also indicates untapped strength. Greater attention to development of this entrepreneurial capacity not only offers the potential for economic growth, it also offers the opportunity to bolster the state's youth population.

A Regional Profile

Hot Spots for New Firms

One of the significant rural entrepreneurial "hot spots" for new firm creation in the *country* is southeast Kentucky.⁸² According to Cognetics, southeast Kentucky ranked 20th in 1995 among the country's top *rural* entrepreneurial areas.⁸³ While southeast Kentucky is considered an entrepreneurial "hot spot" by Cognetics, the south central region of the state experienced the highest growth

rate of new firms (11.2 percent) during the first half of the 1990s; it is followed by the urban triangle (8.5 percent), western Kentucky (6.4 percent), and eastern Kentucky (3.5 percent).⁸⁴ Statewide, the number of businesses with employees increased by 7.8 percent from 1990 to 1995.⁸⁵

More specifically, 22 counties experienced a growth rate of at least 15 percent in firm formation during the first half of the 1990s. These counties are geographically distributed across all regions of the state (see Map 1). Table 7 shows the 10 counties that experienced the highest growth in firm formation from 1990 to 1995.

TABLE 7 Kentucky Counties with the Highest Growth Rate of Firm Formation, 1990 to 1995			
Number of Business Establishments			
County	1990	1995	% Increase
Bullitt	550	755	37.3
Robertson	25	34	36.0
Magoffin	148	200	35.1
Russell	233	309	32.6
McLean	135	177	31.1
Menifee	50	64	28.0
Scott	442	559	26.5
Spencer	93	117	25.8
Trimble	56	69	23.2
Oldham	605	742	22.6

Source: *County Business Patterns*, various years.

⁸¹ Gary M. Stern, "Young Entrepreneurs Make Their Mark," *Nation's Business* Aug. 1996: 49.

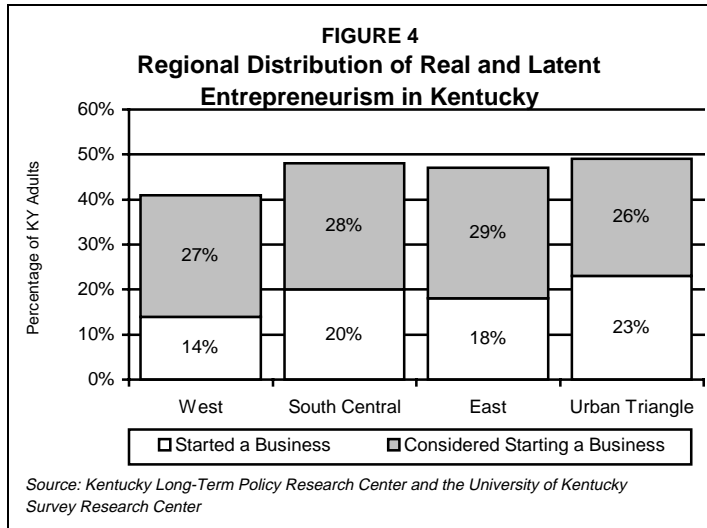
⁸² Cognetics, "Entrepreneurial Hot Spots," Cambridge, MA, 1995. This assessment is based on the number of new firms and the growth of existent firms. Specifically, it factors in the number of "significant starts," the number of firms started in the last 10 years that employ at least five people as a percentage of all firms, and the number of "young growers," the percentage of firms less than 10 years old that have experienced significant growth for the last four years.

⁸³ Mountain Association for Community Economic Development (MACED), *Promoting Entrepreneurship in Central Appalachia* (Berea: Author, 1997).

⁸⁴ See Appendix E for a regional map of Kentucky.

⁸⁵ U.S. Dept. of Commerce, *County Business Patterns*, various years.

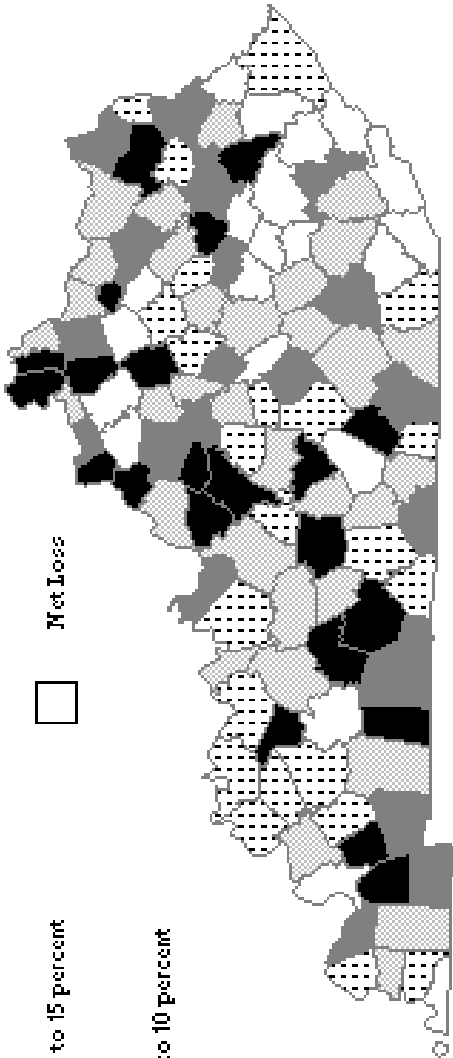
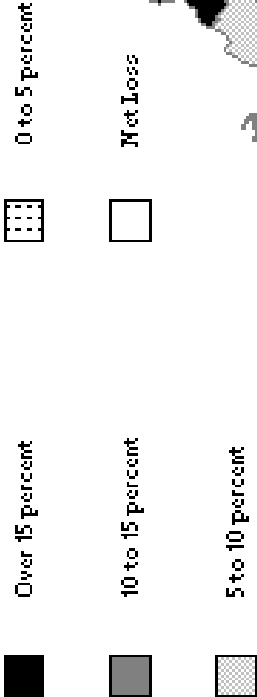
While the south central region led Kentucky in the first half of the 1990s in the growth rate of firm formation, the Urban Triangle leads Kentucky in the percentage of individuals who have started businesses (see Figure 4). A survey conducted by the University of Kentucky Survey Research Center for the Kentucky Long-Term Policy Research Center in the Fall of 1996 found that an estimated 21 percent of all Kentucky adults (18 and over) have started a business. Moreover, of the adults who have not started a business, an estimated 27 percent indicated that they had seriously considered starting a business.⁸⁶ Figure 4 also shows that regional differences with respect to real and latent entrepreneurship are negligible.



⁸⁶ This survey was conducted during the Fall of 1996 by the University of Kentucky Survey Research Center. The questions are: *Have you ever started a business?* and *Have you ever seriously considered starting your own business?* A total of 676 interviews were completed for this survey.

Map 1
Firm Growth, 1990-1995, by county

Percent Growth in Number of Firms



Source: County Business Patterns, various years

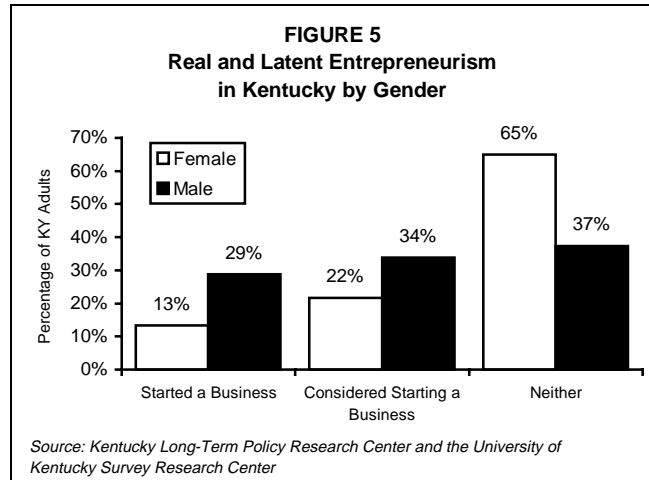
A Demographic Profile

Gender

According to the National Foundation for Women Business Owners, Kentucky was home to 99,000 women-owned firms in 1996.⁸⁷ Yet, despite the fact that women-owned Kentucky firms increased 39 percent from 1987 to 1992 to a total of 74,280 firms, the bulk of Kentucky's entrepreneurs are men. Around 66 percent of adult Kentuckians who reported in the general population survey that they had started a business are male and 77 percent of respondents to the survey of small business owners reported that the principal owner of their business was male.⁸⁸ In comparison, Kentucky's overall population in 1990 was approximately 48 percent male.⁸⁹

Figure 5 illustrates the gender differences with respect to who has started a business or seriously considered starting a business in Kentucky. As Figure 5 shows, a higher percentage of men have started businesses and seriously considered starting a business. Nearly two thirds of women in Kentucky have neither started a business nor considered starting one, compared with just over a third of Kentucky's adult male population. These data appear to confirm the findings of the 1996 Task Force to Study Businesses Owned by Women—that women entrepreneurs face significant obstacles.⁹⁰ While women may be more risk averse than men, SBA has found national evidence of disadvantage:

- Women-owned firms comprise 30 percent of small businesses but collect only 14 percent of business receipts.
- Two thirds of women business owners report problems working with financial institutions and rely extensively on credit cards to finance their businesses.
- Less than 2 percent of federal government prime contracts go to women.⁹¹



⁸⁷ USSBA, 1997 *Small Business Profile*.

⁸⁸ Survey of Small Business Owners, Q-48, *Is the principal owner male or female?* Kentucky Long-Term Policy Research Center, Frankfort, Kentucky, 1997.

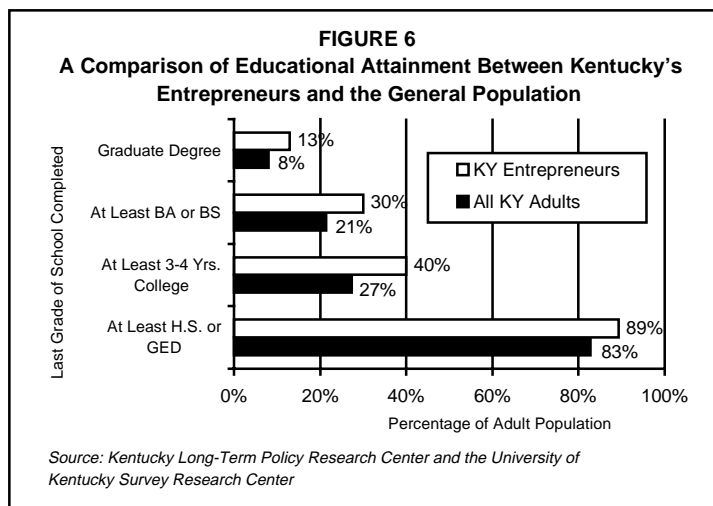
⁸⁹ Bureau of the Census, 1990 *Census of Population: Social and Economic Characteristics, Kentucky* (Washington: U.S. Department of Commerce, 1993).

⁹⁰ See "Report Urges Patton to Help Women Owned Businesses in State," *The Courier-Journal*, 22 Aug. 1996. The Task Force offered several recommendations to enhance the prospects of women entrepreneurs. They include creating a committee of women business owners, compiling information about women-owned businesses, adding women to the state's Economic Development Partnership Board, creating a venture capital fund, strengthening job training and improving basic skills in math and science, and establishing and expanding entrepreneurial training for girls and women.

⁹¹ USSBA, Office of Advocacy, "Facts About Women Business Owners," online, SBA, Internet (available at: www.sbaonline.sba.gov:70/00Business/development/Womens-Business-Ownership/facts.txt).

Education

Kentucky entrepreneurs tend to have more education, on average, than the general population, a circumstance that correlates with other studies of small business owners. Indeed, other studies have found that an educated population is associated with entrepreneurship.⁹² In fact, successful entrepreneurs average about



13 years of education.⁹³ And when the firm is involved in technology, the average increases considerably. Figure 6 compares the educational attainment of Kentucky's entrepreneurs with the state's general population.⁹⁴ Around 40 percent of Kentucky's entrepreneurs have at least three to four years of college and about 30 percent have at least a bachelor's degree.⁹⁵ By comparison, approximately 27 percent

of adult Kentucky respondents (over age 18) to the University of Kentucky's general population telephone survey report having at least three to four years of college and around 21 percent report having at least a bachelor's degree. This sample, however, may overstate the educational status of the general population given that it includes only those Kentuckians with a telephone. March 1996 Census Bureau estimates placed Kentucky's adult population (25 years and older) of college graduates at 17.5 percent.⁹⁶

It should be noted that, while higher educational attainment and entrepreneurial activity are clearly related, a high level of education is not a prerequisite for entrepreneurship. For example, almost 11 percent of the Kentuckians who reported that they had started a business in the general population survey did not have a high school diploma or a GED. However, the findings of a 1993 study of patterns associated with state-level growth in small business by Bruce D. Phillipa supported state investment in education and in high-technology development.⁹⁷ Both high populations of college graduates and the presence of high-technology firms were strongly associated with higher shares of new jobs.⁹⁸

⁹² Bruce D. Phillipa, "The Growth of Small Firm Jobs by State, 1984-1988," *Business Economics* April 1993: 48.

⁹³ Campbell as cited by the Louisville Chamber.

⁹⁴ These data are from the Fall 1996 statewide survey conducted by the University of Kentucky Survey Research Center for the Kentucky Long-Term Policy Research Center. This is the respondent's *current* education level, not the education level at the time they started a business.

⁹⁵ These numbers are similar to those obtained through the Survey of Small Business Owners. Approximately 41 percent of respondents to the Survey of Small Business Owners reported that they had a Bachelor's degree. The question (Q-46) is: *Which of the following best describes the training of the principal owner?* The results are listed in Appendix A.

⁹⁶ U.S. Bureau of the Census, "Educational Attainment in the United States: March 1996" (P20-493), U.S. Department of Commerce, Washington, DC, 1996.

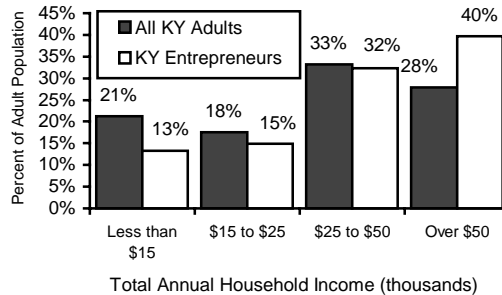
⁹⁷ Phillipa.

⁹⁸ Phillipa.

Income

Kentucky's entrepreneurs tend to have higher incomes than the typical Kentuckian, but we cannot impute causation in either direction based on our data. Nevertheless, the portion of Kentucky households that have incomes greater than \$50,000 annually is about 28 percent. By comparison, an estimated 40 percent to 45 percent of Kentucky's "entrepreneurial households" have incomes of at least \$50,000 per year.⁹⁹ Figure 7 illustrates how entrepreneurial

FIGURE 7
A Comparison of Household Income for Kentucky Entrepreneurs and the General Population



Source: Kentucky Long-Term Policy Research Center and the University of Kentucky Survey Research Center

TABLE 8
What was the principal owner's estimated total household income when he or she started this business?
(percent of respondents)

Under \$5,000	3.7%
\$5,000 - \$7,499	1.4%
\$7,500 - \$9,999	1.6%
\$10,000 - \$12,499	2.3%
\$12,500 - \$14,999	3.0%
\$15,000 - \$19,999	3.2%
\$20,000 - \$24,999	6.0%
\$25,000 - \$29,999	6.9%
\$30,000 - \$39,999	13.8%
\$40,000 - \$49,999	12.9%
\$50,000 - \$69,999	21.0%
\$70,000 - \$89,999	8.8%
\$90,000 - \$120,000	7.6%
Over \$120,000	7.8%

Source: Survey of Small Business Owners, Kentucky Long-Term Policy Research Center, 1997

activity is associated with higher incomes. Likewise, Table 8 shows this same relationship, but it also illustrates how some Kentuckians have been able to launch small enterprises on relatively low incomes. For instance, almost 4 percent of the respondents to the small business owners' survey started their business when their household incomes were under \$5,000.

It takes capital, of course, to start a business, and this undoubtedly helps explain why entrepreneurship is associated with higher income levels. The results of the small business owners' survey show that while 13.8 percent of these small businesses were launched with \$5,000 or less and 22.7 percent were started with \$10,000 or less, the "typical" amount needed to launch a new small business is around \$40,000, not an insignificant amount.¹⁰⁰ And over half of the respondents to the small business owners' survey (57.7 percent) indicated that they used money from personal savings, friends, or family to start their business, with \$20,000 being the typical amount.¹⁰¹

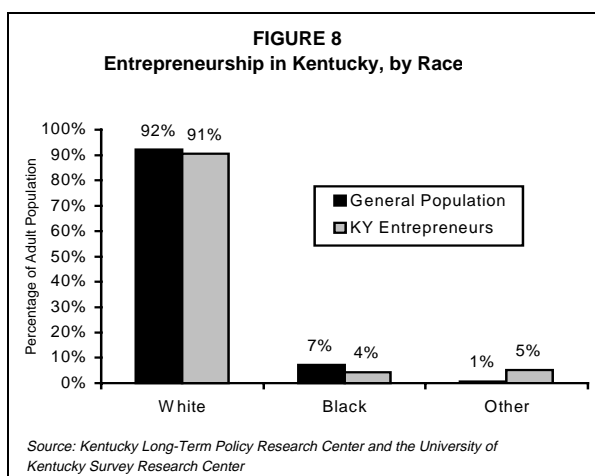
⁹⁹ The Fall 1996 statewide survey conducted by the University of Kentucky Survey Research Center found that of those individuals who indicated they had started a business, 39.7 percent had household incomes that were equal to or greater than \$50,000 annually. In the Kentucky Long-Term Policy Research Center's Statewide Survey of Small Business Owners, 45.2 percent of the respondents reported that the principal owner's estimated total household income was equal to or greater than \$50,000 per year when he or she started the business. The question is: (Q-49) *What was the principal owner's estimated total household income when he or she started this business?*

¹⁰⁰ The following question was asked on the Center's Survey of Small Business Owners: (Q-17) *How much money (from all sources) did it take to launch this business?* The sample size is 428 and the mean, median, and mode are, respectively, \$134,935, \$39,500, and \$20,000. When we say the "typical" amount needed to launch a new business, we are referring to the \$39,500 median. This amount is similar to what the bankers reported. In the bankers survey, we asked: (Q-15) *How large is your institution's typical (or average) small business loan for new small business start-ups?* The sample size is 72 and the mean, median, and mode are, respectively, \$60,600, \$50,000, and \$50,000.

¹⁰¹ The question asked of the small business owners was: (Q-18) *How much money did you receive from the following sources to start this business (Please provide the approximate amount from each source)?* One of the options is "From Personal Savings, Friends or Family." The median value for this variable is \$20,000.

Race

The number of black-owned businesses in the United States increased 46 percent between 1987 and 1992, according to a Census Bureau survey.¹⁰² In Kentucky, black-owned businesses also grew substantially, but the trend was not as pronounced. The number of black-owned businesses increased 36.4 percent between 1987 and 1992, and the ownership rate (number of businesses per 1,000 black population) increased 30.7 percent. Figure 8 shows the distribution of Kentucky's entrepreneurs by race.¹⁰³



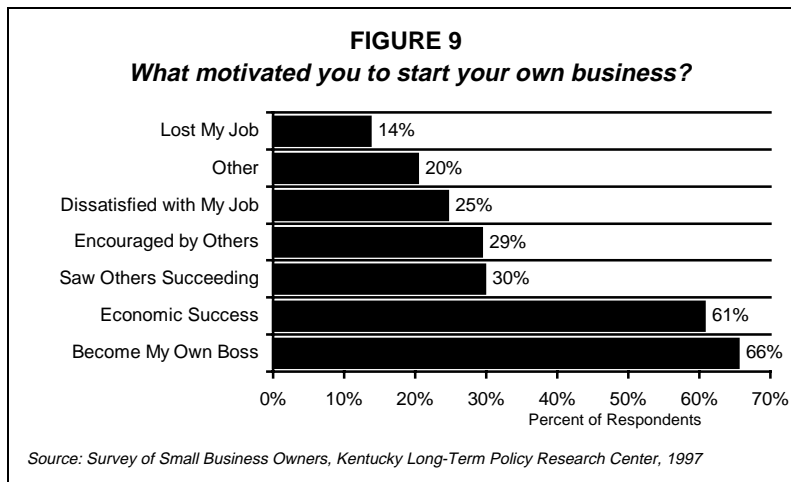
¹⁰² Mergenhausen 1996.

¹⁰³ The general population data are from the U.S. Bureau of the Census, and the data on Kentucky's entrepreneurs are from the University of Kentucky Survey Research Center's Fall 1996 statewide survey.

The Entrepreneurial Motivation

Gaining Wealth and Independence

Scholars focusing on entrepreneurship frequently refer to an “entrepreneurial event” in the life of the individual—the catalyst that prompts one to start a business. Downsizing, for example, is believed to be the entrepreneurial event that has driven many motivated managers with access to capital resources into small business ownership.¹⁰⁴ Yet, only around 14 percent of the respondents to the small business survey cited “Lost My Job” as their entrepreneurial motivation. As Figure 9 illustrates, the vast majority of small business owners wanted to become their own boss and achieve economic success.¹⁰⁵ And, significantly, almost 60 percent of these entrepreneurs indicate that the example and the encouragement of others played an important role in motivating them to start a business. These findings underscore the long-term importance of cultivating a culture of entrepreneurship that provides continual reinforcement for entrepreneurial impulses.

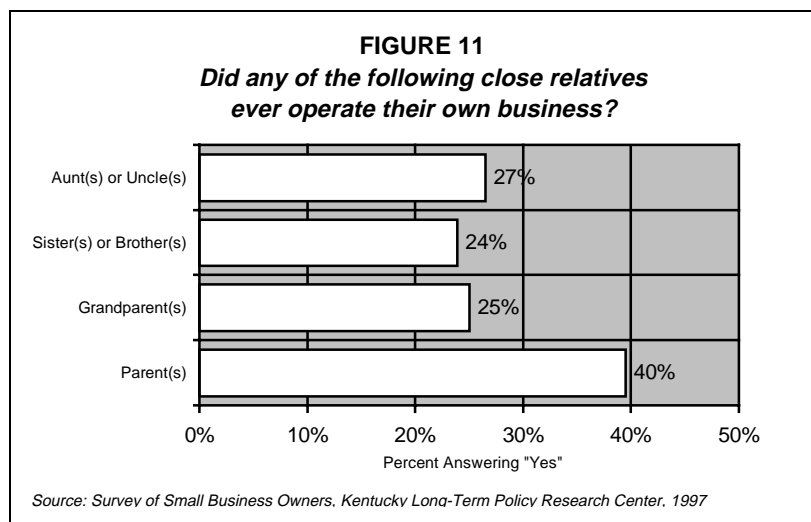
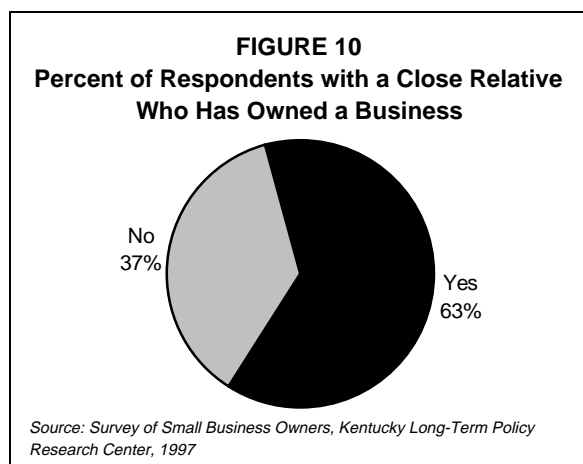


¹⁰⁴ Kentucky has fortunately experienced minimal downsizing. While there were 2,399 total layoff events (or layoffs of more than 50 individuals from a single establishment during a consecutive five-week period) affecting 339,315 individuals in the United States over the third and fourth quarters of 1995, Kentucky was largely unaffected by such events—experiencing only 10 involving 895 individuals (see U.S. Bureau of Labor Statistics, 1996a). Compared to many states, Kentucky’s workforce is not heavily populated with middle managers—those who have been downsized in record numbers during the last few years. Less than 10 percent of Kentucky’s workforce was in executive, administrative, and managerial occupations in 1990 compared to 12.3 percent nationally (refer to U.S. Bureau of the Census, 1990).

¹⁰⁵ Survey of Small Business Owners, (Q-5) *What motivated you to start your own business?* The totals do not add to 100 percent because the respondents were instructed to circle all answers that apply.

Role Models

The results presented in Figure 10 also suggest that role models have a catalytic effect. Nearly one third (30 percent) of the small business owners cited *Saw Example of Others Succeeding in Business* as a reason for starting their own business. In fact, about 63 percent of the respondents to our small business owners' survey have a close relative who has operated his or her own business (see Figure 10). And as Figure 11 shows, "parent" is the most frequently cited relative at 40 percent.¹⁰⁶

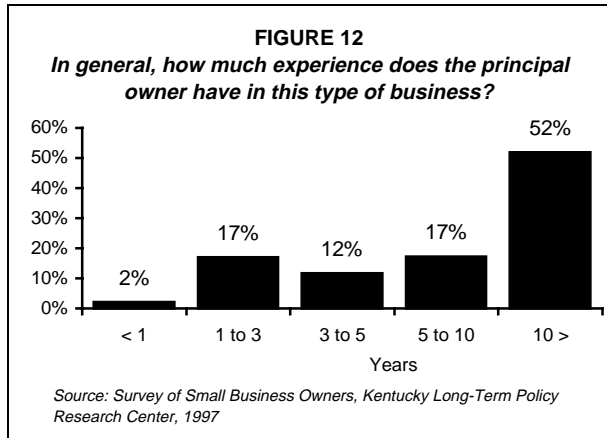


¹⁰⁶ Survey of Small Business Owners, (Q-4) *Did any of the following close relatives ever operate their own businesses?*

Business Experience

The Value of Longevity

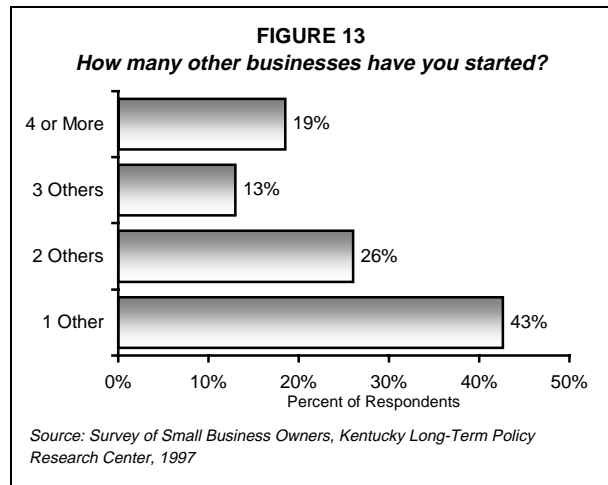
Respondents to the Center's Survey of Small Business Owners evidence several years of experience. In fact, a majority (52 percent) indicated that they had more than 10 years experience in



their particular type of business (see Figure 12).¹⁰⁷ Clearly, experience is an important characteristic for entrepreneurs, and studies have confirmed the importance of this factor. Paul Reynolds, for instance, found that the majority of CEOs of hyper-growth start-ups had more than 10 years experience in the industries in which they had founded their companies. By contrast, the majority of CEOs of low- to no-growth companies had no experience or had spent just a few years learning their industries from the inside.¹⁰⁸

Practice Makes Perfect

Almost 40 percent of respondents to the Center's Survey of Small Business Owners had started more than one business,¹⁰⁹ with many having experience with several new ventures. As Figure 13 shows, 43 percent of those who have started more than one business have started one other business, and nearly a fifth of them (18.5 percent) have started four or more other businesses.¹¹⁰ Having experienced an earlier venture apparently teaches the risks of running a company and fosters a better understanding of what it takes to construct organizations from scratch. "Founders of



¹⁰⁷ Survey of Small Business Owners, (Q-45) *In general, how much experience does the principal owner have in this type of business?*

¹⁰⁸ Brokaw, March 1993.

¹⁰⁹ Survey of Small Business Owners, (Q-3) *Is this the first business you have ever started?* Almost 40 percent (38.9 percent) answered "No."

¹¹⁰ Survey of Small Business Owners, (Q3.1) *(If no) How many other businesses have you started?*

multiple companies learn how much time it takes to do the little things, and how potentially derailing those little things can be.”¹¹¹ Half the 1992 *Inc.* 500 CEOs had started at least one other business (many of which eventually failed) before their current one took off, and a sizable number (17 percent) had started three or more. This pattern was mirrored by the Reynolds study as 63 percent of his hyper-growth CEOs had started at least one other business, and 23 percent had started three or more.

Conclusion

As we stated in the introduction to this chapter, the typical entrepreneur in Kentucky is a white male, around 45 years old, has above average education and income, has started more than one business, lives in the state's urban triangle, and comes from a family with entrepreneurial role models. The following chapters explore some of the important factors that will help broaden and diversify Kentucky's entrepreneurial landscape.

¹¹¹ Brokaw, March 1993, p. 58.

Taking Kentucky's Entrepreneurial Pulse

Since the measuring device has been constructed by the observer . . . we have to remember that what we observe is not nature in itself but nature exposed to our method of questioning.

Werner Karl Heisenberg, 1958

If entrepreneurship is to become an engine of growth for the Commonwealth, we must first identify our strengths and weaknesses, then build and minimize accordingly. But measuring the constellation of forces that influence entrepreneurial vitality is no easy task. If, however, “you torture the numbers long enough,” suggests Mitch Mumma, a North Carolina venture capitalist and a panelist at the 1996 Southern Growth Policies Board conference, Capitalizing Southern Growth, “they will eventually confess.” A number of useful metrics taken in combination indicate entrepreneurial health, the latent potential of a people and a place for enterprise development. Here we look at two “report cards” on entrepreneurial capacity and examine recognized inputs or raw materials of entrepreneurship and the resultant outcomes or entrepreneurial products.

Importantly, the Kentucky Long-Term Policy Research Center is not the first organization to assess the Commonwealth’s capacity for spawning new enterprises. Indeed, throughout the state, critical attention is being paid to both the importance of and the climate for entrepreneurship in the Commonwealth.¹¹² Most who have attempted the difficult task of taking Kentucky’s entrepreneurial pulse find the Commonwealth to be ailing in a number of ways. Indeed, long-standing weaknesses in our foundation for development, namely undereducation and poverty, adversely affect entrepreneurship, just as they do all aspects of development. We find, however, that the anemia, which these assessments of the state’s entrepreneurial capacity consistently identify, may be largely attributable to its rural character. Because Kentucky is far more rural than most states (slightly more than half the population lives

Because Kentucky is far more rural than most states, the classic limitations of rural economies exert a profound influence on the aggregate data so often used to measure entrepreneurial capacity. Without due consideration of this underlying factor, analyses consistently indicate weakness when real entrepreneurial strength is often present.

¹¹² In 1996, the Louisville Area Chamber of Commerce reported on Louisville’s potential for enterprise development. More recently, the Mountain Association for Community Economic Development (MACED) reported on its research in Appalachia, which included interviews with an estimated 50 entrepreneurs in the region and with individuals about their perceptions of entrepreneurship. The MACED report was followed by “Kentucky’s Entrepreneurial Capacity,” prepared for the Kentucky Science and Technology Council as part of the Council’s new Kentucky Inc. initiative by University of Kentucky agricultural economists Stephan J. Goetz and David Freshwater. Further, in its most recent issue of *Kentucky Commerce*, the state Chamber of Commerce reports on successful Kentucky entrepreneurs and offers expert opinions on the state of entrepreneurship in the Commonwealth.

in rural communities compared with a national average of 20 percent),¹¹³ the classic limitations of rural economies exert a profound influence on the aggregate data so often used to measure entrepreneurial capacity. While rural Kentucky is home to some of the state's most innovative entrepreneurs, including many farmers, the dispersion of our population tends to dilute their achievements. Given the advantages urban areas offer, Kentucky's rural entrepreneurs are all the more remarkable. Without due consideration of this underlying factor, analyses consistently indicate weakness when real entrepreneurial strength is often present.

Scholars focusing on entrepreneurship frequently refer to an "entrepreneurial event" in the life of the individual, the catalyst that prompts someone to start a business. But entrepreneurs do not emerge by accident or solely as a consequence of influential events. The motivating event in the life of an individual may be of little consequence if the social and economic climate of a state or a community discourages entrepreneurial impulses or provides insufficient support for entrepreneurial endeavors. While neither assures entrepreneurial development, Dick Dedic, Manager of the Technology Applications Center at the University of Kentucky, observes, "The process of technological innovation hinges on the presence of pioneers—firms and individuals—and a supportive local infrastructure."¹¹⁴

So why are some places more entrepreneurial than others? What factors enable one state to reap the benefits of myriad high-growth companies while another harvests relatively few? Research suggests the factors which most contribute to entrepreneurial health are:

- A Supportive Culture
- Demographic Diversity
- Education and Intellectual Capital
- Management and Support Talent
- Financial Capital
- Vision Beyond One's Borders
- Technology That Meets Market Needs
- Abundant Social Capital
- Public Sector Support.

In this chapter, we examine these factors as well as the findings of Kentucky Long-Term Policy Research Center surveys that attempt to gauge Kentucky's entrepreneurial capacity. We begin with two report cards on entrepreneurship in the state: the Corporation for Enterprise Development's annual assessment and the evaluation of some small business owners in the state. We follow with an examination of issues that follows the construct adopted by University of Kentucky professors Stephan Goetz and David Freshwater in the Kentucky Science and Technology Council report, *Kentucky's Entrepreneurial Capacity*. We look first at inputs, the raw materials which, by most assessments, foster and enable entrepreneurship, then at outcomes, indicators that attempt to assess the resultant entrepreneurial products.

¹¹³ Bureau of the Census, *Statistical Abstract of the United States 1994* (Washington: U.S. Dept. of Commerce) 38.

¹¹⁴ Dick Dedic, "Trends and Future Values in Technology," *Exploring the Frontier of the Future* Eds. Michael T. Childress, Peter Schirmer, Billie M. Sebastian and Michal Smith-Mello (Frankfort: Kentucky Long-Term Policy Research Center, 1996) 181-188.

Report Cards

Corporation for Enterprise Development

For the past 10 years, the Corporation for Enterprise Development (CFED) has published *The Development Report Card for the States*, which provides an annual assessment of each state's economy and its potential for future growth based on more than 50 socioeconomic indicators. It is useful for consideration here because, unlike many business climate reports, the CFED assessment compares and grades all states in three indices that measure private and public economic health: economic performance, business vitality, and development capacity.¹¹⁵ This analysis is supplemented by a general rating of the ability of each state's tax and fiscal systems to support long-term economic development, as well as supplementary (but ungraded) measures of quality of life.

Importantly, CFED's assessment of Kentucky's business vitality moved from a "D" in 1995 to a first-ever "A" in 1996, largely on the strength of the diversity of the state's economy and the improved competitiveness of its firms. According to CFED, Kentucky is home to the fourth most diversified economy in the nation, an important foundation for future small business development and expansion. Moreover, its firms enjoyed the sixth lowest rate of business closings as well as improved income growth. Entrepreneurial energy, however, was only average, based on CFED indices. Its 1996 report card ranks Kentucky 43rd in new companies formed, 23rd in the percentage of change in new companies, and 24th in new business job growth.

In spite of this positive assessment of business vitality, CFED identifies significant liabilities. While Kentucky ranks in the top 25 on several indices CFED considers, it earned only a "D" due largely to persistent inequities: high poverty, poor income distribution, and rural/urban disparities. CFED concludes that these structural inequities negate encouraging employment growth (19th), relatively low unemployment (24th), a low crime rate (8th), and middle-of-the-pack performance on several health and environmental conditions.

Survey of Small Business Owners in Kentucky

How do Kentucky's small business owners assess the entrepreneurial climate in Kentucky? In the Center's Survey of Small Business Owners, we asked respondents to evaluate 32 factors, which influence small business success in Kentucky. They were asked to indicate whether the factor was "good," "fair," or "poor." Table 9 shows the percentages, which are ranked in descending order of the percent saying "good," and indicates the number of respondents.¹¹⁶

As one can see in Table 9, only four factors garnered more than 50 percent in the "good" category: general quality of life (66.2); highway system (55.6); telecommunications system (54.7); and quality of universities (51.3). An examination of the factors that received the highest percentage of positive or "good" scores reveals that, generally, small business owners are pleased with the development of Kentucky's infrastructure (i.e., highway system, telecommunications system, access to airport) and the quality of the education system (i.e., universities, community colleges, technical education). On the other hand, the factors which received the highest percentage of negative or "poor" scores are: availability of tax incentives (73.2); workers compensation rates¹¹⁷ (69.6); state tax rates (53.2); local tax rates (48.2); responsiveness of government agencies (41.8); and small

¹¹⁵ The CFED subindices and historical data comparing Kentucky to surrounding states can be found in Appendix G.

¹¹⁶ Survey of Small Business Owners: (Q-36) *Based on your knowledge and experience, how would you rate the following factors which affect the ability of entrepreneurs to launch and grow small businesses in Kentucky? Are they good, fair or poor? (Circle a number for each factor you have knowledge about).*

¹¹⁷ This survey was conducted prior to recent reforms of Workers Compensation.

business assistance services (41.7). These results suggest that the respondents to the small business survey are generally displeased with the taxes they pay and the overall level of support they receive from all levels of government.

TABLE 9
Small Business Owners' Assessment of Factors
Affecting Small Business Success in Kentucky

F A C T O R	Percent of Responses			No. of Responses
	GOOD	FAIR	POOR	
General quality of life	66.2	30.7	3.1	414
Highway system	55.6	35.8	8.6	394
Telecommunications system	54.7	41.3	3.9	380
Quality of universities	51.3	41.4	7.3	382
Locally owned banks	48.2	36.4	15.4	390
Access to airports	47.1	35.1	17.8	382
Quality of community colleges	36.6	53.3	10.1	377
Quality of professional services	35.5	53.6	10.9	377
Quality of technical education	32.7	54.6	12.7	355
Availability of professional services	32.1	54.0	13.8	383
Workforce productivity	29.6	53.3	17.2	379
Access to financing	29.4	45.2	25.4	394
Workforce attitude	28.3	47.8	23.9	385
Wage rates	26.2	64.8	9.1	386
Quality of elementary & secondary schools	26.0	50.8	23.2	392
National/regional banks	25.9	50.1	23.9	351
Workplace safety regulations	25.1	58.9	16.1	355
Cost of facilities and land	24.8	51.4	23.8	387
Entrepreneurial role models	23.6	47.4	29.0	348
Workforce skills	22.9	53.2	23.9	380
Community support for small business	22.5	47.5	30.0	377
Access to market information	18.7	46.0	35.3	185
Workforce computer literacy	16.8	44.8	38.3	368
Zoning laws	16.4	57.6	26.0	354
Land use regulations	16.3	59.9	23.7	337
Small business assistance services	14.3	44.0	41.7	197
Environmental regulations	14.2	56.9	28.9	346
Local tax rates	11.4	40.4	48.2	411
Responsiveness of government agencies	10.6	47.6	41.8	359
State tax rates	8.5	38.3	53.2	412
Availability of tax incentives	6.9	19.9	73.2	377
Workers compensation rates	5.9	24.5	69.6	404

Source: Survey of Small Business Owners, Kentucky Long-Term Policy Research Center, 1997

Inputs—The Raw Materials of Entrepreneurship

Unlike the Corporation for Enterprise Development, we find evidence of considerable latent entrepreneurial energy in Kentucky. However, that energy is clearly circumscribed by structural deficiencies such as undereducation, poverty, and income inequality,¹¹⁸ and by the rural nature of our geography that continues, as CFED concludes, to inhibit the state's development capacity. Because Kentucky is far more rural than most states, vital resources, including the capital, talent and support needed to sustain entrepreneurship, are significantly diluted in many rural communities. Some simply cannot sustain a continuous stream of new enterprises that depend upon local markets, circumstances that make a high-quality communications and technology infrastructure critical to broad development goals. Importantly, however, improvements to the underlying weaknesses in Kentucky's human infrastructure are underway. Added focus and resources could transform potential into real economic strength. Our challenge, as University of Kentucky agricultural economist David Freshwater observes, is to discover how to stimulate rural entrepreneurship that is likely to differ from urban entrepreneurship in form and function.

A Supportive Culture

Our research suggests that Kentucky may be home to significant latent entrepreneurial potential. Nearly half of Kentuckians have either started a business or strongly considered doing so, according to findings from a Kentucky Long-Term Policy Research Center survey conducted by the University of Kentucky Survey Research Center in the Fall of 1996. Specifically, 21 percent of Kentuckians report having actually started businesses (see Figure 14). While this does not compare favorably with the results of a 1997 *Inc./Gallup* poll which shows that 30 percent of American workers have owned a business at some time,¹¹⁹ latent and unrealized interest in entrepreneurship in Kentucky may be appreciably higher. We find that 27 percent of Kentuckians have considered starting a business. Most were so serious that they took steps toward doing so, conducting research into the feasibility of launching a business or seeking information from one of a number of sources.¹²⁰ In contrast, only 19 percent of national respondents to the *Inc./Gallup* poll responded affirmatively when asked, "Have you taken steps to start your own business?"¹²¹

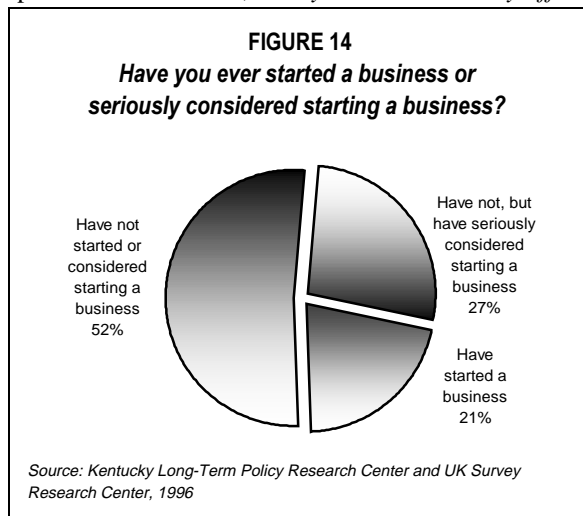
¹¹⁸ According to a study released by the Center on Budget and Policy Priorities in December 1997, the income gap (the gap between the richest and poorest segments of the population) has grown faster in Kentucky over the past two decades than in all but four other states. See "Kentucky Income Gap Is Widening, Study Finds," *Lexington Herald-Leader* 17 Dec. 97: A 1.

¹¹⁹ Hopkins and Seglin.

¹²⁰ Of those individuals who said that they have not started a business but have seriously considered starting one, 67 percent reported they have talked to other people about it, 51 percent have read books about starting a business, 24 percent have contacted the U.S. Small Business Administration, 10 percent have contacted the Chamber of Commerce, and 5 percent have done something else (or "Other"). Approximately 15 percent responded that they have done nothing, and in fact, were "just thinking about it." Overall, 85 percent had done something and about half (50 percent) had done two or more of these things.

¹²¹ Hopkins and Seglin. We should note that these polls differ markedly. The wording of the questions posed differ somewhat. The Center, for example, asked respondents if they had ever started a business or considered starting a business which is different from asking individuals, as *Inc./Gallup* did, if they have ever owned a business, which might involve buying or inheriting, rather than starting a business. Also, the pool of respondents differs in that the *Inc./Gallup* poll screened respondents by age (18 and older only) and employment status (employed at least 30 hours a week), preconditions that would likely raise the number of former business owners. Nevertheless, some basis for comparison exists. Interestingly, when the *Inc./Gallup* poll asked respondents, "Would you ever consider starting a business?", 64 percent answered affirmatively. Logically, this would include both those individuals who had started a business and those who had simply considered doing so. If so, the 48 percent of Kentuckians who responded affirmatively to similar queries may or may not indicate a gap.

Significantly, we also find that most small business owners in Kentucky find the Commonwealth a good place to launch a new enterprise. In the Center's Survey of Small Business Owners, the respondents were asked, "Do you think Kentucky offers a friendly environment to entrepreneurs who want to start a business?"



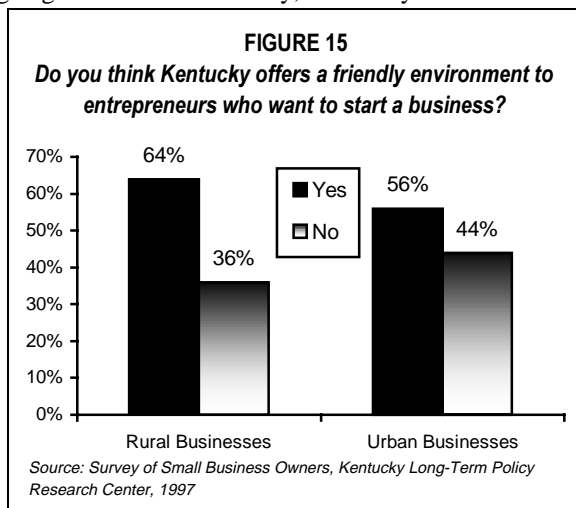
The majority (59 percent) responded affirmatively while 41 percent responded negatively, suggesting that small business experience and latent entrepreneurship find considerable positive reinforcement in the state. Interestingly, urban and rural small business owners responded to this question differently, and not necessarily the way most would predict. Figure 15 shows that a higher percentage of rural small business owners responded positively (64 percent) to this question compared to urban entrepreneurs (56 percent). However, this difference between the rural and urban entrepreneurs is not statistically significant.¹²² Although most small business owners find Kentucky

a good place to start a business, considerable room for improvement exists.

These findings suggest that, contrary to most assumptions, many Kentuckians are risk-takers who value the independence and the possibilities that business ownership offers. Moreover, those who indicated that they had strongly considered starting a business carefully weighed the possibility and sought expert advice. Among those who have become small business owners, satisfaction with the state's receptivity to their efforts runs relatively high. By lending added muscle to the development of this important and rapidly expanding segment of our economy, Kentucky can enable the creation and expansion of more small businesses.

To an unknown extent, however, elements of Kentucky's culture may inhibit entrepreneurship. In its examination of entrepreneurship in Appalachia, for example, MACED found that many entrepreneurs perceived a negative attitude toward success in the region. One long-time observer described "a family-based, subsistence style, egalitarian culture" that, in some cases, discourages the pursuit of individual success.¹²³ The observations of entrepreneurs who are employers, however, could be products of poor labor-management relations.

The family-centered culture that prevails throughout the state may also be a subtle force that undermines entrepreneurship. RAND scholar Francis Fukuyama argues in his book, *Trust: The Social Virtues and the Creation of Prosperity*, that societies which elevate family bonds



¹²² The mean value for rural entrepreneurs is 64 percent with a 95 percent confidence interval between 57 and 71 percent. The mean value for the urban entrepreneurs is 56 percent with a 95 percent confidence interval between 50 and 62. Since the 95 percent confidence intervals overlap, we cannot say the responses between the urban and rural entrepreneurs are statistically significant at the .05 alpha level.

¹²³ MACED, *Promoting Entrepreneurship* 8.

above all others often have weak voluntary associations that profoundly influence the development of their economies.¹²⁴ Hence, what we frequently perceive as a strength may actually undermine our ability to build organizations or businesses that demand high levels of trust beyond family boundaries. Conversely, strong family ties could actually help foster entrepreneurship, enabling access to capital and helping forge other community links that facilitate business formation and success.

Further, a lack of receptivity to migrants from other regions, other states and other cultures works against the introduction of new businesses in some locales. Strong and supportive networks of business people and organizations that nurture new businesses are a perennial characteristic of successful entrepreneurial environments. Strengthening this capacity will be key to realizing the Commonwealth's entrepreneurial potential.

Importantly, however, the state boasts example after example of individuals who have become highly successful entrepreneurs, many of whom have chosen to locate in Kentucky and found a supportive and welcoming community. The challenge confronting the Commonwealth is to instill in people a sense of the possibilities entrepreneurship holds in the communities and the regions where they live. Without visible support for entrepreneurship and the presence of mentors, those who wish to pursue success too often do not see Kentucky as an option.

Demographic Diversity

Another factor that influences a state's ability to produce entrepreneurs is the diversity of its population. Diversity provides a natural infusion of ideas, products and new approaches. International migrants are a particularly valuable asset in the global marketplace. A recent study by the Center for Entrepreneurial Management in New York City identified immigrants or the children of immigrants as one of "nine demographic, psychographic, and behavioral characteristics that most predispose one toward entrepreneurship."¹²⁵ Kentucky, however, lacks diversity in its population, a factor that influences the world view and the business conduct of its community of entrepreneurs. Based on its research into entrepreneurship in Appalachia, for example, MACED concludes that regional insularity impedes exposure to new ideas and to business opportunities that could enable new enterprise development as well as the expansion of existent enterprises.¹²⁶ The same may be true of many regions of the state.

Unfortunately, Kentucky has continued to swim against the tide of diversity.¹²⁷ The state's black population was only 7.1 percent in 1990, compared with 12.1 percent nationally.¹²⁸ In 1990, less than 1 percent of Kentucky's population was foreign-born or American Indian, although isolated pockets of foreign-born individuals have emerged. The community of Asian immigrants connected to Toyota's location in Georgetown, for example, has, in all likelihood, expanded since data were collected for the 1990 census. Moreover, migrant farm workers opened the way for an expanding Hispanic population across the state. Many of these new immigrants to the Commonwealth are starting small businesses that, in turn, attract other immigrants.

However, Kentucky has made progress in increasing the diversity of its small business owners. While a significant male-female disparity in business ownership persists in Kentucky, women have made significant gains in recent years. Between 1987 and 1992, the most recent years for which data from the U.S. Bureau of the Census are available, women-owned Kentucky firms increased 39 per-

¹²⁴ Francis Fukuyama, *Trust: The Social Virtues & the Creation of Prosperity* (New York: The Free Press, 1995) 28-29.

¹²⁵ A. Bianchi, "Entrepreneurship 101," *Inc.* May 1993.

¹²⁶ MACED, *Promoting Entrepreneurship* 8.

¹²⁷ According to Census data, Kentucky's population was 86.7 percent white in 1900, 92.5 percent in 1940, and 92 percent in 1990.

¹²⁸ U.S. Bureau of the Census, *1990 Census of the Population: Social and Economic Characteristics, Kentucky* (Washington: Government Printing Office, 1990).

cent to a total of 74,280.¹²⁹ By comparison, during this same period, the number of women-owned businesses increased 43 percent nationwide.¹³⁰

However, a governor's task force found significant obstacles for women and recommended a number of steps to enhance their opportunities.¹³¹ The Task Force to Study Businesses Owned by Women convened under the administration of Governor Brereton Jones offered several recommendations to enhance the prospects of women entrepreneurs in the state. They included:

- An advisory committee of women business owners
- The collection of data about women-owned businesses
- The appointment of women to the state's Economic Development Partnership Board
- A venture capital fund
- Stronger job training and improved basic skills in math and science, and
- Expanded entrepreneurial training for girls and women.

Minority-owned firms have also increased significantly in Kentucky in recent years. Black-owned firms increased 36.4 percent from 1987 to 1992, to a total of 5,097 firms and the ownership rate (number of businesses per 1,000 black population) increased 30.7 percent. Nationally, however, black-owned businesses increased 46 percent during the same period. On the whole, Kentucky ranks below the national average in both business growth and ownership rates for blacks. Still, the entrepreneurial spirit appears to be thriving among Kentucky's black communities. Hispanic-owned firms also rose 110 percent between 1987 and 1992, to 752 firms, and businesses owned by Asians and Pacific Islanders, American Indians, and Alaskans also increased by 79.5 percent to 1,614 firms.¹³²

The age distribution of a population also relates to entrepreneurial capacity. During the 1990s, the Commonwealth is enjoying unexpectedly high population growth due largely to the emergence of favorable migration patterns. For only the second decade in the 20th century, more people are coming to Kentucky than are leaving. The phenomenon is a product of noneconomic migration,¹³³ of people, many of whom are retired natives, choosing to locate in Kentucky. Among migrants to the Bluegrass State between 1985 and 1990, according to state demographer Michael Price, one of every two age 55 and older was a native returning home.¹³⁴ Thus, the source of entrepreneurial ideas and capital, as well as the customer base for small businesses, is being expanded in many rural communities, as well as urban areas. Older citizens are traditionally viewed as a strong potential market for a number of businesses, from health care to personal services. If this pattern of migration continues, older native Kentuckians are likely to continue returning home in the years to come, a particularly significant trend given the aging of the largest generation in U.S. history—Baby Boomers.

Research, however, suggests that states with an aging population like Kentucky's may be less likely to experience high rates of entrepreneurial growth. While many older citizens become entrepreneurs or investors in small businesses, most entrepreneurs start businesses between the ages of 25 and 40. A recent study by Babson College professor Paul Reynolds found that individuals between the ages of 25 and 35 formed the most start-ups in a study group of 1,200 entrepreneurs.¹³⁵ Consid-

¹²⁹ USSBA, "1996 Small Business Profile—Kentucky."

¹³⁰ *Women-Owned Businesses in the United States: A Fact Sheet, 1996.*

¹³¹ See "Report Urges Patton to Help Women Owned Businesses in State," *The Courier-Journal*, 22 Aug. 1996.

¹³² USSBA, "1996 Profile."

¹³³ Michael Price, "Migration in Kentucky: Will the Circle Be Unbroken?" *Exploring the Frontier of the Future* Eds. Michael T. Childress, Peter Schirmer, Billie M. Sebastian and Michal Smith-Mello (Frankfort: Kentucky Long-Term Policy Research Center, 1996) 5-10.

¹³⁴ Price.

¹³⁵ Stern.

erable entrepreneurial energy is now emanating from a younger cohort that may be adapting more readily to decentralized employment patterns. Assuming high population growth, the 25-40 age group in Kentucky is expected to decline slightly as a portion of the overall population, from 21.2 percent in 2000, to 20.4 percent in 2010, to 19.2 percent in 2020.¹³⁶ The decline is projected to be less sharp under a more moderate growth scenario.

While recent population growth is largely concentrated in the state's metropolitan counties, many rural counties are also enjoying strong growth, particularly those that appeal to retirees and commuters. The relative undereducation of recent migrants to rural communities, however, could dilute the entrepreneurial potential that an expanding population holds. Nearly 55 percent (54.9 percent) of migrants to rural Kentucky between 1985 and 1990 did not have a high school diploma.¹³⁷ Conversely, migrants to Kentucky's urban areas have tended to be younger and more educated than those leaving.

Education and Intellectual Capital

As previously noted, higher levels of educational attainment are associated with higher levels of entrepreneurial activity. Consequently, the state's educational status is an important factor to consider in gauging its capacity for development from within. While the Commonwealth has ranked near the bottom nationally for many years in terms of educational status, Kentucky is enjoying an education renaissance. The nationally recognized, award-winning Kentucky Education Reform Act (KERA) is sowing the seeds of dramatic change in our public schools that, over the long term, could produce significant improvements in the state's educational status. Whether a decade alone will prove sufficient time to reverse the effects of a culture that is still unduly burdened by poverty and has historically undervalued education remains to be seen. While almost 42 percent of Kentuckians who did not have a high school diploma were 60 years or older in 1990, the state's depressed birth rate and its aging population could delay the rewards of KERA beyond the next census. Today, according to the U.S. Bureau of the Census, Kentucky remains among 10 southern states that have trailed the nation for decades in high school graduation rates, but the margin of difference between these states is negligible at best.

However, the trends toward educational improvement in Kentucky are strong. While the Commonwealth struggles with the same issues surrounding performance measurement that attend education reform efforts across the nation, the benefits of elementary and secondary school reform have been measurable and significant. Widely accepted empirical evidence shows that this once weak support structure for development grows stronger with each passing year. Moreover, a comprehensive literacy survey conducted by the University of Kentucky and released in 1997 found, contrary to expectations, that literacy rates among working-age Kentuckians actually exceed national averages. Additionally, the benefits of record college enrollment throughout the late 1980s are yet to be fully realized. Recent Bureau of the Census estimates of the percentage of the state's population aged 25 and older that are college graduates show an increase from 13.6 percent in 1990 to an estimated 17.5 percent in 1996.¹³⁸ Reforms of Kentucky's higher education system are also expected to improve dramatically the research capacity of our major universities and infuse the regional universities and the community colleges with new resources and focus.

Recognition of the sharpened focus being brought to academic programs throughout the state is seen in this year's inclusion of the University of Louisville College of Business and Public Administration on *Success* magazine's list of the top 20 schools in the nation for training would-be entre-

¹³⁶ Michael Price, Thomas Sawyer and Martye Scobee, *How Many Kentuckians: Population Forecasts 1995-2020* (Louisville: Kentucky State Data Center, 1995).

¹³⁷ Price, 8.

¹³⁸ U.S. Bureau of the Census, "Educational Attainment in the United States: March 1996" (P20-493), U.S. Department of Commerce, Washington, DC.

preneurs. The list, which includes Harvard, Cornell, the University of Pennsylvania Wharton School, and the Universities of California at Berkeley and Los Angeles, was compiled based on faculty credentials, the caliber of students, curriculum, and services that link students with the business community. That the University of Louisville was named to a *Success* list of 10 emerging entrepreneurial schools only last year indicates rapid progress in this area of expertise.¹³⁹ That progress and the notoriety it has garnered from the popular media are likely to increase enrollment and spur additional improvements.

In spite of the progress Kentucky has made in education, it must increase its store of intellectual capital. Key to this effort will be the expansion of opportunities and enterprises that can attract and hold more highly educated people, particularly those who bring technological, scientific and managerial expertise to our economy. Importantly, the state is expected to enjoy fairly robust employment growth in many of these occupational areas between 1994 and 2005. In the "professional, paraprofessional and technical" occupational group, employment is expected to grow by 24.6 percent or by 74,184 new jobs by 2005. Within the occupational group, jobs for engineers are expected to increase 30 percent as 3,390 new jobs are created. While the rate of employment growth among scientists will not be as significant, employment is predicted to increase 13.3 percent for physical scientists, 16.1 percent for life scientists and 24.8 for social scientists, as 750 new jobs are created in these fields. Job openings for computer scientists are expected to grow significantly, by 55.9 percent for a total of 4,344 new jobs in this increasingly important technological field. Managerial talent is also predicted to increase significantly in the state as jobs for general managers and chief executives grow by 18.6 percent or 7,890 new jobs by 2005.¹⁴⁰

Though Kentucky will make important gains in professions that should increase its store of intellectual capital, the growth will not likely close gaps in some occupational categories that are key to entrepreneurial development. In 1990, the portion of high-skill white-collar professional jobs in the state, for example, trailed the national average by 6 percentage points. Though the trend has been toward increasing portions of professionals in our occupational makeup, low-skill blue-collar jobs have also increased in recent years.¹⁴¹

Management and Support Talent

One of the most important factors in generating entrepreneurial activity is the quality of management and support talent. According to Ralph Shelton, president of Southeast Fuels and former chairman of North Carolina's Minority/Women Economic Development Council, investors make decisions about business investments based on the management teams that will run those businesses.¹⁴² Many in the financial community echo the sentiment that good management is the key to successful entrepreneurial ventures. Presenters at a June 1996 Southern Growth Policies Board Conference, *Capitalizing the South*, cited managerial talent as the principal factor for success. In fact, according to Pratt's 1994 *Guide to Venture Capital Sources*, a venture capitalist would prefer a grade A entrepreneur with a grade B business idea to a grade B entrepreneur with a grade A idea.¹⁴³ And for good reason. The most often cited cause of small business failure, after the lack of access to capital, is the lack of managerial expertise.¹⁴⁴ The ability of a state to cultivate successful entrepre-

¹³⁹ "Success Magazine Ranks U of L, IU in Top 25 Schools for Entrepreneurs," *The Courier-Journal* 1 Sept. 97: B-2.

¹⁴⁰ Employment Services 19-21.

¹⁴¹ Harold Salzman, William P. O'Hare, Ron T. Crouch, and Eric A. Schneider, *Kentucky's Workforce* (Frankfort: Cabinet for Workforce Development, 1992).

¹⁴² Shelton, 1996.

¹⁴³ Dingee, Haslett and Smollen, 1994.

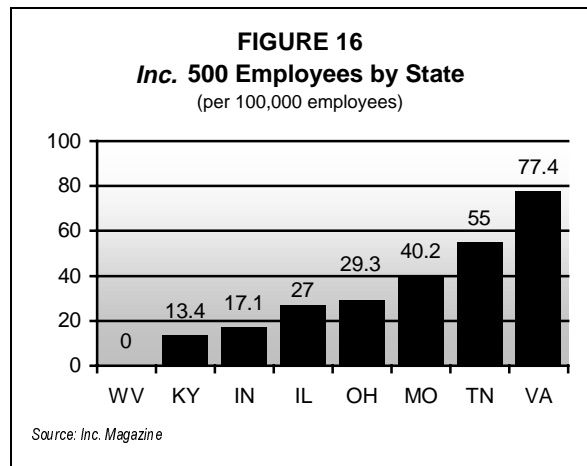
¹⁴⁴ The lack of managerial expertise was also the most cited reason that institutional sources denied businesses access to capital in the first place (Walker, 1996).

neurs, therefore, largely rests on its ability to propagate, attract, and retain people who possess grade A qualities.

Our 1997 survey of Kentucky bankers confirms that these traditional lenders also consider “strength of management” the most important factor to consider when evaluating a loan for a small business start-up.¹⁴⁵ Fully 92 percent of Kentucky bankers rated “strength of management” as a “very important” criterion to consider in the loan process. Similarly, 68.6 percent of respondents rated “experience starting/running business” as “very important.” Only “strength of business plan,” which is clearly related to managerial expertise, was rated more highly; 77 percent of respondents ranked it as “very important.”

The immediate question that arises is where such a “ready-made” pool of experienced managers can be found. Unfortunately, fewer Kentucky citizens are employed in the fastest growing privately held firms than in nearly any neighboring state. Figure 16 illustrates the level of Kentuckians employed at the entrepreneurial *Inc. 500* firms compared to the contiguous states. While, as we will further explore in this chapter, Kentucky's poor performance here is largely attributable to the concentration of *Inc. 500* firms in urban areas, the consequences remain the same. Fewer entrepreneurial role models and, in this case, fewer beneficiaries of high-growth firms are present in the state. However, the state is taking important steps to enhance the overall level of human capital as discussed in the previous section on education and intellectual capital. Over time, these steps will likely elevate the availability and quality of the state's management talent.

The availability and quality of support talent is also vital for a robust entrepreneurial climate. Results from our Survey of Small Business Owners suggest that, in general, this sample of entrepreneurs is satisfied with the quality and availability of professional services. As Table 9 illustrates, the quality and availability of professional services ranked relatively high with 35.5 percent of the small business owners assessing the *quality* as “good” and 32.1 percent assessing the *availability* as “good.”

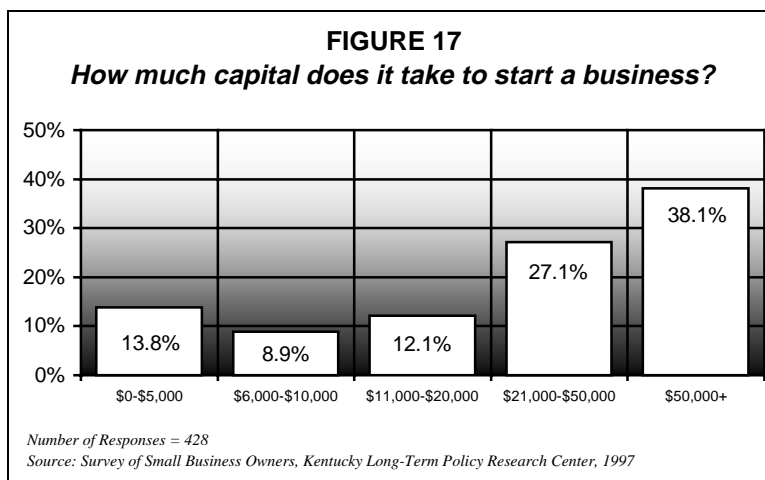


¹⁴⁵ Bankers' survey (Q-18): *How important are the following items when deciding whether to lend to an entrepreneur starting a new business?* Respondents were asked to rate the degree of importance of the following items: Proximity to Your Institution; Strength of Business Plan; Experience Starting/Running Business; Collateral; Strength of Management; Other.

Financial Capital

How much capital does it take to start a business?

Most firms are launched with a relatively modest amount of cash. The Bureau of the Census' most recent survey of small businesses in the United States found that 30 percent of all companies were started with less than \$5,000, while 67 percent of all companies were started with less than \$50,000.¹⁴⁶ As mentioned in the previous chapter, results from the Survey of Small Business Owners show that, while 13.8 percent of Kentucky's small businesses were begun with \$5,000 or less and 22.7 percent were started with \$10,000 or less, the "typical" amount needed to launch a new small business is around \$40,000.¹⁴⁷ Figure 17 illustrates the distribution of responses to the small business owners' survey question: *How much money (from all sources) did it take to launch this business?* A majority (about 62 percent) of these businesses were launched with less than \$50,000.



Where does start-up capital come from?

Typically, the modest capital demands, particularly for microenterprises, are often met by the savings of the entrepreneur or his or her family and friends or by credit cards. Even the nation's most successful firms, those whose growth rates warrant an appearance on the annual *Inc.* 500 list compiled by *Inc.* magazine, relied heavily on their own savings and the support of family and friends. Among CEO's of 1997 *Inc.* 500 firms, 79 percent reported using personal savings, 16 percent also looked to family and 7 percent to friends; credit cards provided capital for 10 percent of the group.¹⁴⁸ Credit cards help keep many small businesses afloat, providing access to capital and goods for 39 percent of owners who reported using personal credit cards and 28 percent who used business credit cards in 1993. Among the smallest firms, those with fewer than 10 employees, 40

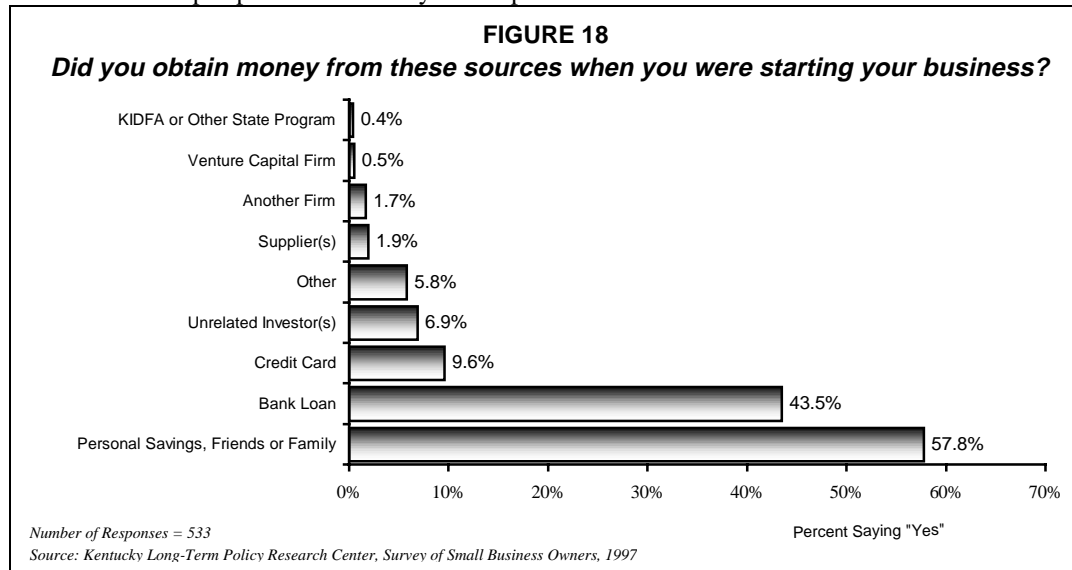
¹⁴⁶ As cited by Leslie Brokaw.

¹⁴⁷ The following question was asked on the Center's Survey of Small Business Owners: (Q-17) *How much money (from all sources) did it take to launch this business?* The sample size is 428 and the mean, median, and mode are, respectively, \$134,935, \$39,500, and \$20,000. When we say the "typical" amount needed to launch a new business, we are referring to the \$39,500 median. This amount is similar to what bankers reported. In the bankers survey, we asked: (Q-15) *How large is your institution's typical (or average) small business loan for new small businesses start-ups?* The sample size is 72 and the mean, median, and mode are, respectively, \$60,600, \$50,000, and \$50,000.

¹⁴⁸ *Inc.*, "The Inc 500: A Statistical Tour," *Inc.* Online, Internet: 31 Oct. 1997.

percent of business owners used credit cards, compared with 23 percent of larger firms, those with 50 or more employees.¹⁴⁹

In Kentucky, over half of the respondents to the Survey of Small Business Owners (57.8 percent) indicated that they used money from personal savings, friends, or family to start their business, with \$20,000 being the typical amount (i.e., median) coming from this source.¹⁵⁰ And 43.5 percent indicated they had obtained a bank loan to start their business, with \$45,000 as the typical amount from this source. Entrepreneurs normally cobble together financing from multiple sources. However, as Figure 18 shows, money from personal savings, family, or friends and bank loans are the two main sources of start-up capital for Kentucky's entrepreneurs.¹⁵¹



Is there enough capital available for Kentucky's entrepreneurs?

Many have argued that the lack of local sources for growth capital inhibits entrepreneurial development in the state. Indeed, when asked to identify the most significant obstacle to launching their business, most of the respondents to the Survey of Small Business Owners cited "financing" (see Figure 19).¹⁵² Yet, when asked to evaluate access to financing in Kentucky, 29.4 percent of the respondents said "good," 45.2 percent said "fair," and only 25.4 percent said "poor."¹⁵³ And when asked to evaluate the process of acquiring financing for their business, nearly 69 percent of the respondents to the Survey of Small Business Owners said it was "appropriately demanding" compared

¹⁴⁹ USSBA, "Facts . . ."

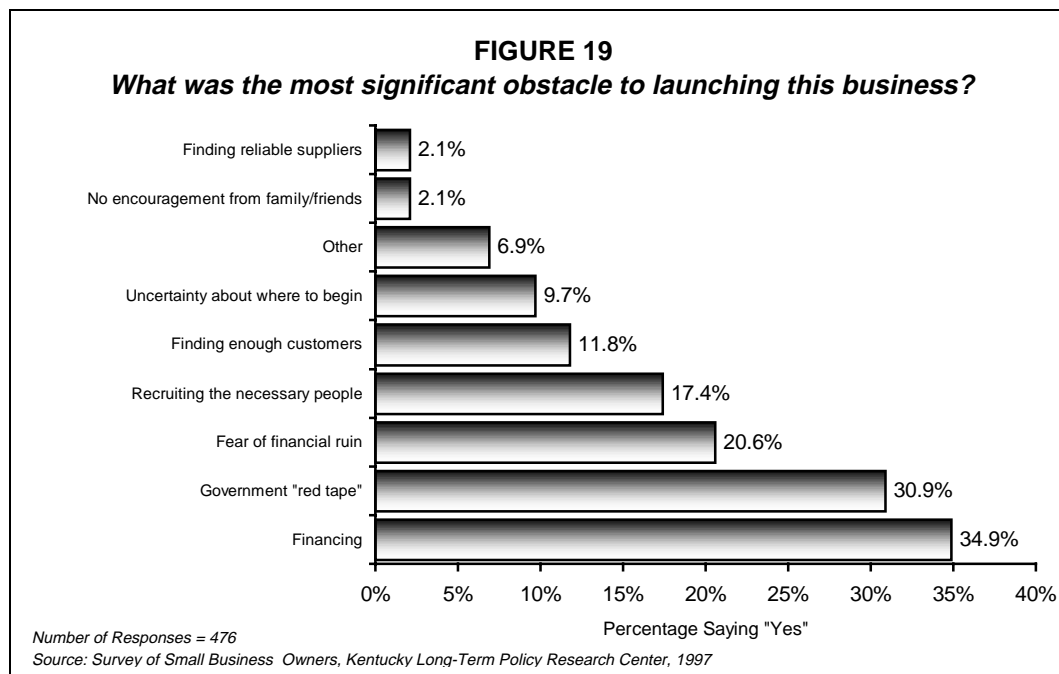
¹⁵⁰ The question asked of the small business owners was: (Q-18) *How much money did you receive from the following sources to start this business (Please provide the approximate amount from each source)?* One of the options is "From Personal Savings, Friends or Family." The median value for this variable is \$20,000.

¹⁵¹ The summary statistics for the other sources are listed in Appendix F. However, the sample sizes are small and the summary statistics might not be representative of the universe of cases.

¹⁵² The question on the survey is: (Q-7) *What was the most significant obstacle to launching this business?*

¹⁵³ Refer to Table 7 in this chapter. The question on the survey is: (Q-36) *Based on your knowledge and experience, how would you rate the following factors which affect the ability of entrepreneurs to launch and grow small businesses in Kentucky? Are they good, fair or poor? (Circle a number for each factor you have knowledge about).* Factor 18 is "Access to financing."

with 31 percent who thought it was “overly difficult.”¹⁵⁴ From the entrepreneur’s perspective, obtaining financing is one of the most difficult challenges in starting a new business, but the data suggest that capital is usually available for resourceful and qualified individuals.



Surprisingly, fewer than half of small businesses in the United States seek external financing in a given year,¹⁵⁵ but those who do typically go to the bank. According to the findings of a 1993 small business finance survey conducted by the Federal Reserve and the U.S. Small Business Administration, “Banks are the dominant source of external financing to small firms,” supplying some form of financing to 37 percent of small businesses.¹⁵⁶

In today’s robust and highly competitive economy, many banks have abandoned reluctance to lend to small businesses in an effort to tap new sources of revenue. Some banks are actually advertising their willingness to make small business loans and, in certain markets, competing aggressively with one another for the opportunity to finance even risky ventures. Between 1994 and 1996, the number of small business bank loans for less than \$1 million increased by 935,000, from 4,322,000 in 1994 to 5,257,000 in 1996. The value of these outstanding loans reached \$163 billion, compared with an estimated \$10 to \$20 billion invested by so-called “angels” and just over \$10 billion by venture capitalists.¹⁵⁷ Consequently, the nation’s most traditional lending source, the one that places high demands on would-be borrowers, is a significant player in small business development. Indeed, over 90 percent of the banks in Kentucky currently make loans to small businesses.¹⁵⁸

¹⁵⁴ Survey of Small Business Owners, (Q-19): *In retrospect, do you believe the process of acquiring financing for this business was overly difficult or appropriately demanding?* There were 360 responses to the question, with 68.6 saying “appropriately demanding” and 31.4 percent saying “overly difficult.”

¹⁵⁵ USSBA, “Facts . . .”

¹⁵⁶ USSBA, “Facts . . .”

¹⁵⁷ Friedman, E.M.

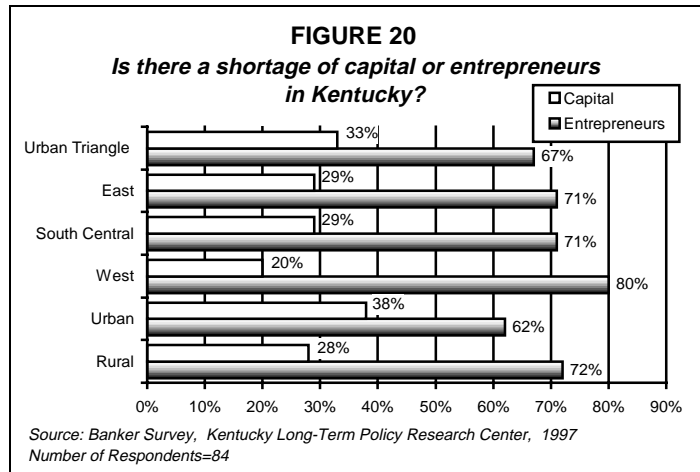
¹⁵⁸ Kentucky Long-Term Policy Research Center, banker survey: (Q-1) *We define “small business” as those having fewer than 20 employees and define entrepreneurs as individuals starting small businesses. Does your institution make loans to small businesses and entrepreneurs in Kentucky?* The results show that 94.6 percent of the 93 banks that responded answered

Given the importance of banks to entrepreneurial development, the Center posed the following question to the state's bankers: *Some people say there is a shortage of capital for potential entrepreneurs in Kentucky. Others contend there is plenty of capital, but a shortage of entrepreneurs to use it. Which is closer to your view?* The consensus of the state's bankers seems to be that capital is less a problem than qualified entrepreneurs to use it. Around 32 percent of the bankers said

"shortage of capital," while the remaining 68 percent said "shortage of entrepreneurs."¹⁵⁹ It is interesting to note the regional differences in Kentucky as well as the urban-rural split. As Figure 20 illustrates, bankers in the state's urban areas are more likely than bankers in rural areas to believe a shortage of capital exists, a somewhat surprising result. Nonetheless, regardless of region or whether the bank is in a rural or urban county, a majority of bankers believe that capital is not in as short a supply as entrepreneurs to use it.¹⁶⁰

A necessary but not sufficient condition for adequate capital to be available for burgeoning and established businesses is that banks be generally well capitalized. An analysis of financial data from Kentucky banks suggests that, on average, Kentucky's banks are. Governmental regulations specify capital levels that must be attained for a bank to be well capitalized. A widely used indicator of capital adequacy is the leverage ratio (core capital to tangible assets). According to *Sheshunoff*, "Many regulators informally suggest that the leverage ratio for community banks should be at least 6 percent, and often ratios of 7 percent or 8 percent are required."¹⁶¹ The average leverage ratio for Kentucky banks in 1996 was 10.3 percent, significantly higher than the recommended 7 to 8 percent;¹⁶² the leverage ratios for Kentucky's regions are 11.3 percent for the West, 9.7 percent in south central Kentucky, 10.5 percent in eastern Kentucky, and 10.2 in Kentucky's urban triangle. These leverage ratios show that Kentucky's banks have abundant capital.

Some may argue, however, that even though Kentucky's banks are well capitalized, they may not be using their capital to support Kentucky's small businesses and entrepreneurs to the fullest extent. For example, it is possible that Kentucky's banking community prefers a more conservative investment approach than what would be entailed under one that relies more heavily on commercial lending. Fortunately, it is possible to gauge the perceived risk within a bank's balance sheet by examining the ratio between the risk-based capital ratio and the core capital ratio.¹⁶³ Ratios under 2.0



"Yes." Of the 5.4 percent of banks that responded "No" (5 banks), 20 percent (or 1 bank) indicated that the institution will be extending loans to small businesses and entrepreneurs in the foreseeable future.

¹⁵⁹ Banker survey (Q-2). Refer to Appendix B.

¹⁶⁰ Of the banks responding to the survey, 53 are located in rural counties and 26 in urban counties. The regional distribution is: West=15, South Central=21, East=14, and Urban Triangle=21.

¹⁶¹ Sheshunoff, *Banks of Kentucky*, 1997, p. i-15.

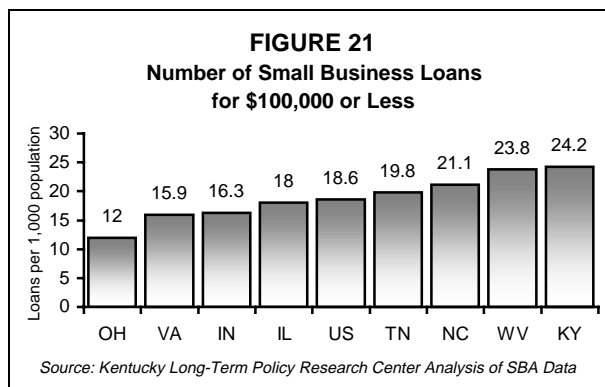
¹⁶² Kentucky Long-Term Policy Research Center analysis of *Sheshunoff* data.

¹⁶³ According to *Sheshunoff*, "Risk-weighted capital ratios provide a measure of capital to assets based on the perceived risk to a bank of each type of asset. Generally, cash, cash equivalents, and U.S. government obligations require no capital; interbank claims and U.S. agency and municipal obligations have a 20 percent risk weighting; residential real estate loans and municipal revenue bonds are risk weighted at 50 percent; and all other assets are risk weighted at 100 percent." The general

suggest a less conservative mix of investments. The average ratio for Kentucky in 1996 was 1.73, which indicates that Kentucky’s banks are, on average, not overly conservative;¹⁶⁴ the ratios for Kentucky’s regions are 1.79 for the West, 1.71 in south central Kentucky, 1.75 in eastern Kentucky, and 1.68 in Kentucky’s urban triangle.

Moreover, an examination of Small Business Administration data shows that Kentucky’s banks are not shy about making small business loans. In 1995, Kentucky banks made 93,404 small business loans that were less than \$100,000.¹⁶⁵

This is 24.2 loans per 1,000 population, which places Kentucky in the forefront of states in the region (see Figure 21). In short, these data support the argument that there is no shortage of bank capital available for Kentucky’s entrepreneurs.



Turning to venture capital, the story is not as good. Traditional venture capitalists meet the market demands of higher-end or later-stage firms and typically deal with hundreds of thousands or millions of dollars.¹⁶⁶ However, only six venture capital firms do business in Kentucky,¹⁶⁷ and many believe that the proclivity of early stage venture capitalists to invest “in the neighborhood” could constrain the growth of firms in Kentucky where few venture capital firms are within easy reach. One study in particular found that of 150 venture capital deals, totaling nearly \$175 million, 125 (83 percent) were located within two hours’ travel time from the office of the firm that originated the financing.¹⁶⁸ As *The Economist* notes, “The reality is that venture capital is mostly a matter of managing and nurturing firms,”¹⁶⁹ and that is, by necessity, a hands-on affair. But hands-on has clearly taken on new meaning in the era of e-mail, fax machines and even video conferencing.

While much ado is made of the paucity of venture capital funds in Kentucky and the Southeast region as a whole, it is worth noting that no venture capital flowed into half the states of the nation during 1995 and 1996.¹⁷⁰ Few would suggest that all of these state economies ground to a standstill as a consequence. Indeed, only 3 percent of the CEOs of 1997 *Inc.* 500 firms report relying on venture capital to finance their firms.¹⁷¹ In 1996, an estimated 75 percent of U.S. venture capital was invested in technology companies where, *The Economist* reports, speed is everything and the improbable exponential growth venture capital firms seek as a return on their investments is within the realm of the possible.¹⁷² Today, U.S. venture capital flows principally into the technology nerve

rule is that the higher the ratio, the more conservative the mix of assets in the bank’s balance sheet. A value over 2 indicates a more conservative mix of investments while a value in the area of 1.7 to 2.0 suggests a less conservative mix of investments.

¹⁶⁴ We should note, however, that many types of risk capital are needed by entrepreneurs, and these ratios gloss over these differences. Some have argued, for example, that many banks are far more reluctant to lend to knowledge-based firms.

¹⁶⁵ USSBA, Office of Advocacy.

¹⁶⁶ R.T. Mayer, R. Radosevich, E.C. Carayannis, M. David and J.G. Butler, *The 1995 National Census of Early-Stage Capital Financing* (Albuquerque: Orion Technical Associates, Inc., 1995) 54.

¹⁶⁷ According to the 1996 edition of *Pratt’s Guide to Venture Capital Sources*, only five venture capital firms are based in the state. A sixth newly formed firm, however, was not included on Pratt’s list.

¹⁶⁸ Mayer et al.

¹⁶⁹ “Venture Capitalists: A Really Big Adventure,” *The Economist* 25 Jan. 1997: 21.

¹⁷⁰ Venture Economics as cited by Goetz and Freshwater, 13.

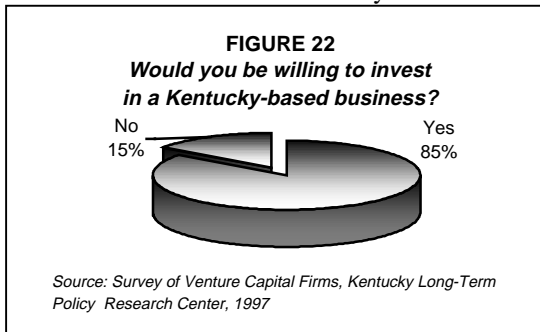
¹⁷¹ *Inc.*, “The Inc 500: A Statistical Tour.”

¹⁷² “Venture Capitalists...”: 20-22.

centers in and around Boston, Massachusetts, and Silicon Valley in California, where Price Waterhouse estimates that 30 percent of all venture capital in the United States was invested in 1995.¹⁷³ During 1995 and 1996, according to Venture Economics, Massachusetts was the highest ranked state in the nation for venture capital receipts, \$406 in venture capital per person, followed by \$130 per person in California.¹⁷⁴ In 1995, according to Price Waterhouse, firms in the South received just \$1.5 billion or 21 percent of the \$7.5 billion in venture capital invested nationally; a third of those investments went to communications firms.¹⁷⁵ Importantly, Price Waterhouse also found that, in spite of the tendency of venture firms to flock together, 20 percent of venture capital came from outside the state where it was invested, suggesting that the geographic reach of venture capital is farther than previously thought.

To learn more about the availability of venture capital to Kentucky entrepreneurs, the Kentucky Long-Term Policy Research Center conducted a 1997 telephone survey of firms in surrounding states that were included in the 1996 edition of *Pratt's Guide to Venture Capital Sources*.¹⁷⁶ This survey sought general information about the availability of capital from venture capital firms and Small Business Investment Corporations (SBIC)¹⁷⁷ within a round-trip, one-day drive of Kentucky. Specifically, we wanted to learn whether venture capital is indeed strongly linked to "the neighborhood." Firms within an estimated three-hour drive from the Kentucky border were chosen because they would be relatively easy for an entrepreneur or a small business owner to travel to in a day.

TABLE 10 Regional Venture Capital Sources, 1997			
	Total	Venture Capital Firms	SBICs
Indiana	8	5	3
Ohio	10	7	3
Tennessee	16	10	6
West Virginia	3	0	3
Kentucky	6	3	3
Totals	43	25	18
Source: <i>Pratt's Guide to Venture Capital Sources</i> , SBA			



The venture capital firms and SBICs surveyed are located in Indiana, Ohio, Tennessee and West Virginia. The breakdown of firms in each state, including Kentucky, is shown in Table 10. As illustrated, a total of 43 venture capital firms or SBICs are either located in Kentucky or within a three-hour drive.¹⁷⁸ Many are relatively new; among the firms we identified, nearly a third were formed in the 1990s. We assumed that Kentucky-based venture capital firms are investing in Kentucky

enterprises and, therefore, did not survey them.¹⁷⁹

¹⁷³ Lawrence M. Alleva, "Is There a Capital Gap in the South? Price Waterhouse Venture Capital Survey Observations," Presentation to Capitalizing Southern Growth Conference, Southern Growth Policies Board, 20-21 June 1996.

¹⁷⁴ Venture Economics as cited by Stephan J. Goetz and David Freshwater.

¹⁷⁵ Price Waterhouse, *National Venture Capital Survey: Selected Findings for the Southern Growth Policies Board* (Atlanta: Author, 1996).

¹⁷⁶ The construction of this survey was based on a 1990 survey and report, "Venture Capital Firms Within Reach of Kentucky Ideas," prepared by Thomas M. Bailey, now an economist with the Economic Development Cabinet.

¹⁷⁷ According to the USSBA, "The Small Business Investment Company Program (SBIC) was started in 1958 by Congress to provide venture capital to small businesses for start-up and growth-capital needs. The SBA licenses and regulates these privately owned and managed investment firms. SBICs provide equity capital, long-term loans and management assistance to qualified small businesses using their own capital and funds obtained at favorable rates through assistance from the SBA."

¹⁷⁸ In 1990, Bailey identified 27 firms within easy reach of Kentucky entrepreneurs.

¹⁷⁹ The surveys were sent to 37 out-of-state firms. Of the 37 identified firms, 32 responded to the Center survey.

Significantly, 85 percent of the (out-of-state) venture capital firms that responded expressed a willingness to invest in Kentucky businesses. Of the 32 respondents, 25 percent reported having previously had some equity in a Kentucky-based business. At present, however, only 19 percent have equity in Kentucky-based businesses, and these investments represent a relatively low percentage of net portfolios. No firm had higher than 20 percent of its portfolio invested in Kentucky businesses. Kentucky-based businesses have sought capital from 46 percent of the firms surveyed.

Further, the findings of our survey indicate that, if the deal has enough merit, venture capital will indeed travel, certainly as far as the three hours in question here. When asked what they saw as the biggest obstacle to making loans in Kentucky, 75 percent or 24 out of 32 of these venture capitalists said they saw no real obstacle to investment in the Commonwealth beyond the need for a sound

TABLE 11 Surrounding State Venture Capitalists and Kentucky Firms	
<i>Willing to invest in Kentucky firms</i>	85%
<i>Have loaned to Kentucky firms</i>	25%
<i>Have investments in Kentucky firms now</i>	19%
<small>Source: Venture capital firm survey, Kentucky Long-Term Policy Research Center, 1997</small>	

business plan and a solid management team. Indeed, a “neighborhood” or regional mission precluded only four firms from investing in Kentucky businesses, and the officer of one of these firms said she was encouraging stockholders to broaden its reach. Three other firms have adopted specific strategies that create obstacles of

sorts because they narrow the focus of their firms to a particular industry or type of business owner, but all are willing to invest in Kentucky within the parameters of their missions. One firm lends only to minority or cash-strapped entrepreneurs. Another backs only biomedical businesses, which, were they located in Kentucky, would likely be of interest to it. Similarly, Batelle Venture Partners based in Columbus, Ohio, focuses only on firms with direct benefit to the natural gas industry. It has received Kentucky proposals, though it has never invested in a Kentucky firm. As one venture capitalist observed, “Kentucky is no different from any other state; the business must have a solid business plan and a strong management team.” Officers of Capital Services & Resources, Inc. and Morgan Keegan Merchant Banking Fund II, L.P. in Memphis, Equitas, L.P. in Nashville, and Ohio Partners in Columbus, Ohio, as well as others, expressed keen interest in seeing more Kentucky firms seek capital. One Cincinnati venture capitalist observed that while the deal flow is lower from Kentucky than other states, those deals received are generally good.

In conclusion, contrary to the oft-made assertion that too little capital is available to entrepreneurs, we find that sufficient, perhaps even abundant capital is available from both public and private sources. Indeed, with respect to venture capital firms in Kentucky and in neighboring states, *there is over \$675 million under management by these firms.*¹⁸⁰ In the next section, we discuss some of the reasons Kentucky’s entrepreneurs might have problems accessing adequate capital.

¹⁸⁰ This is the capital under management by those firms that indicated a willingness to lend to Kentucky-based businesses. We could not identify the amount of capital under management for several of the firms, so the \$675 million is a conservative estimate.

Why do entrepreneurs experience problems obtaining capital?

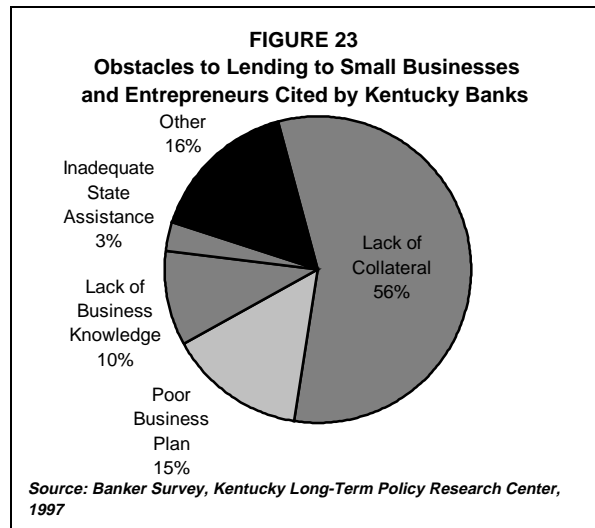
Lack of information about where to get capital might be Kentucky's entrepreneurs' biggest problem. Indeed, MACED concludes that information about sources of capital, rather than the capital itself, may be the commodity in short supply in the Appalachian region.¹⁸¹ Nonetheless, most entrepreneurs realize that banks are the dominant source of outside capital for small businesses in the U.S. and Kentucky (see Figure 18). What then are the factors most important to banks when making a lending decision? Table 12 shows the results from the following question on the Center's banker survey: *How important are the following items*

TABLE 12
The Importance of Various Factors to
Kentucky Banks When Making a Lending Decision
(percentage of banks)

	Very Unimportant	Somewhat Unimportant	Somewhat Important	Very Important
Proximity to the Bank	5.8	11.6	50	32.6
Strength of Business Plan	2.3	1.1	19.5	77
Experience Starting or Running a Business	3.5	0	27.9	68.6
Collateral	2.3	3.4	39.1	55.2
Strength of Management	3.4	0	4.6	92

Source: Banker Survey, Kentucky Long-Term Policy Research Center, 1997

when deciding whether to lend to an entrepreneur starting a new business?¹⁸² The results show that many factors are important, with some being relatively more important. Strength of management garnered the highest percentage of "very important" at 92 percent, followed by the strength of the business plan (77 percent), experience starting or running a business (67 percent), and collateral (55.2 percent).



We also asked the bankers an open-ended question about the obstacles they experience in making loans to Kentucky's entrepreneurs.¹⁸³ As Figure 23 illustrates, "lack of collateral" is the biggest obstacle for the bankers. Asset accumulation, therefore, should be a critical goal, particularly for poor and low-income individuals. The second most frequently mentioned obstacle is "poor or no business plans." Indeed, only about 39 percent of the businesses that responded to the Survey of Small Business Owners indicated they had a written business plan for their business.¹⁸⁴ So, clearly, loan requests to banks, the most common source of small business financing, must be sup-

ported with well-constructed business plans to satisfy these traditional lenders. Borrowers must bring more to the table than an idea.

¹⁸¹ MACED, *Promoting Entrepreneurship* 9.

¹⁸² Banker survey (Q-18). See Appendix B.

¹⁸³ Banker survey (Q-21): *What do you see as the biggest obstacle in making loans to Kentucky's small businesses and entrepreneurs?*

¹⁸⁴ Survey of Small Business Owners (Q-9): *Do you have a written business plan for this business?* There were 470 respondents to this question (60.6 percent responded with NO and 39.4 percent said YES).

Most small business owners we surveyed view the demands of financing as reasonable. As previously mentioned, when asked to evaluate the process of acquiring financing for their business, nearly 69 percent of the respondents to the Survey of Small Business Owners said it was “appropriately demanding” compared with 31 percent who thought it was “overly difficult.”¹⁸⁵ What then, are some of the factors that help account for the difficulty in acquiring financing? We examined several factors, such as the gender of the entrepreneur, the location of the business, and the loan amount, to see if differences in these factors were associated with problems in acquiring financing. As Table 13 illustrates, neither the location of the business, the size of the loan, the ownership of the bank, the gender of the entrepreneur nor their experience appears to have a significant effect on the difficulty of acquiring financing. Paradoxically, if they had a written business plan, they are a little more likely to have answered “overly difficult.” The only factor in Table 13 that shows a huge effect is whether SBA guaranteed the loan. Finally, we constructed a statistical model to estimate the independent effect of the variables listed in Table 13.¹⁸⁶ The only variable that is statistically significant (at the .05 level) is whether the SBA guaranteed the loan.

TABLE 13 <i>Do you believe the process of acquiring financing for your business was</i> <i>overly difficult or appropriately demanding?</i> (percent of respondents)				
		Overly Difficult	Appropriately Demanding	Sample Size
	Entire Sample	31.4	68.6	360
Location	Rural	31.5	68.5	143
	Urban	31.6	68.4	212
Loan Type	SBA guarantee	52.2	47.8	23
	Not a SBA loan	25.4	74.6	189
	Large ^a (over \$43,500)	29.5	70.5	105
	Small (under \$43,500)	27.7	72.3	101
Bank	Locally Owned	28.1	71.9	153
	Multi-State/National	27.6	72.4	58
Gender	Female	35.7	64.3	70
	Male	31.6	68.4	263
Business Plan	Had a written plan	35.9	64.2	159
	Did not have one	27.6	72.4	199
Experience	Their first business	31.9	68.1	216
	Started more than one	29.8	70.2	141
^a The size of the loan is defined here by whether it is greater or less than the median (or \$43,500). Source: Survey of Small Business Owners, Kentucky Long-Term Policy Research Center, 1997				

¹⁸⁵ Survey of Small Business Owners (Q-19): *In retrospect, do you believe the process of acquiring financing for this business was overly difficult or appropriately demanding?* There were 360 responses to the question, with 68.6 percent saying “appropriately demanding” and 31.4 percent saying “overly difficult.”

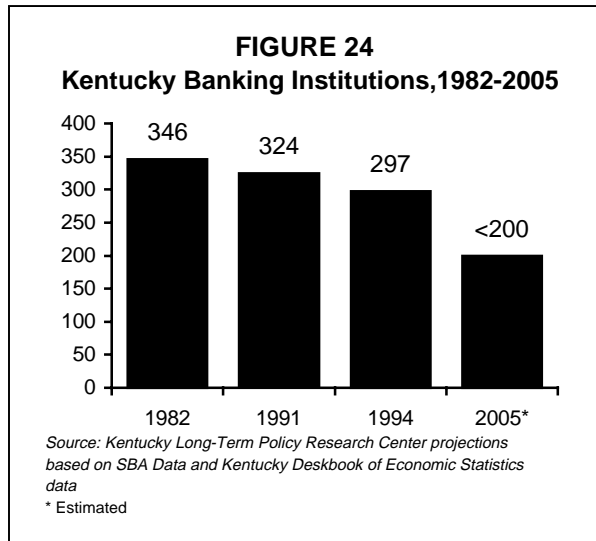
¹⁸⁶ The difficulty of acquiring financing can be modeled as a dichotomous dependent variable. Accordingly, we use a probit specification to estimate the parameter values for each of the variables listed in Table 10. This allows us to identify the impact of each of the factors on the likelihood the entrepreneur would have had answered “overly difficult,” or $P(Y_i=1)$, while holding all other variables constant. This maximum likelihood model predicts that, on average, there is a .271 probability an entrepreneur would characterize the process as “overly difficult” (remember that the sample value is .314). The parameter estimates, standard errors and significance levels are listed in Table F.2 in Appendix F. (Note: If the business is located in a rural area, then dummy variable $RURALBIZ=1$. If the entrepreneur acquired a SBA guaranteed loan, then dummy variable $SBALOAN=1$. If the loan was obtained from a community bank, then dummy variable $COMBANK=1$. The amount of the loan, or $LG10LOAN$, was transformed, because of outliers, to its base-10 logarithm. The dummy variable $BIZPLAN=1$ if the entrepreneur had a written business plan. The dummy variable $FIRSTBIZ=1$ if it was the entrepreneurs first business start-up, and $GENDER=1$ if the entrepreneur is a male.)

How will bank consolidation affect capital availability?

Largely as a result of consolidation, the number of banks in the United States declined from more than 14,000 in 1985 to about 10,000 in 1995, and about 60 percent of the banking market is concentrated in the hands of the nation's 25 largest banks.^{187 188} If this trend continues, the nation will have fewer than 7,000 banks, and Kentucky will have fewer than 200 by 2005, down from 346 in 1982.¹⁸⁹ The 1995 acquisition of Louisville-based Liberty National Bank by Ohio's BancOne is but one of many high-profile examples of bank consolidations. Other Kentucky banks acquired during recent years include Citizens Fidelity by PNC, Cumberland Bank by Fifth Third, and Kentucky National by National City.¹⁹⁰ Already, the five largest banking institutions in the state are owned by holding companies outside Kentucky.¹⁹¹

Because commercial banks are the principal providers of the loans that fuel entrepreneurship, trends that influence their disposition toward small firms affect business formation, revenue and employment. Some fear that bank consolidation, which has come in response to intensified competition for an array of financial products, has changed the dynamic between these lenders and small businesses. Small community banks generally recognize that their own success depends on the development capacity of the community, and huge multistate and national banks that snatch up community banks undermine the commitment to nurturing small business and local development, or so the story goes.

The evidence suggests that this story is inaccurate for a number of reasons. First, Kentucky's largest banks—the top 20 percent—accounted for 48.5 percent of all small business loans and 55 percent of all small business dollars in 1996.¹⁹² The bottom 20 percent made only 4.6 percent of the small business loans and loaned only 3.3 percent of the small business dollars. The nine banks operating in Kentucky with assets of \$1 billion or more accounted for 25 percent of all money loaned by banks to small businesses. Small banks may be more inclined to make small business loans, but they do not approach the sheer volume of loans made by bigger banks. Second, about half of the small



¹⁸⁷ J. Weber and S. Woolley, "The Next Feeding Frenzy Will Feature Smaller Fish," *Business Week* 11 Sept. 1995: 38-39.

¹⁸⁸ One of the key reasons for the trend toward bank consolidation was the deregulation of capital markets and the impact it had on capital formation in economic development. In the early 1980s, deregulation of the financial services industry at both the federal and state levels encouraged the consolidation of banking interests across the country. Federal regulations were changed in the early 1980s to allow interstate bank acquisitions. Many states followed suit, passing legislation allowing out-of-state banking institutions to acquire local banks.

¹⁸⁹ Kentucky has consistently averaged about 2.7 percent of the total number of banks across the country. The U.S. Small Business Administration estimates the total number of banks in the year 2005 at around 7,000. If Kentucky continues to account for 2.7 percent of that 7,000 there will be fewer than 200 banks in the state.

¹⁹⁰ T. Bode, "Consolidations Substantial Over Past Five Years," *Kentucky Journal* June/July 1996: 2-3.

¹⁹¹ Angie Hatton, "State's Largest Banks Are Out-of-State Institutions," *The Kentucky Gazette* 9 July 1996: 1.

¹⁹² The Small Business Administration defines small business loans as those less than \$250,000.

bank acquisitions are made by other small banks, and medium-sized banks make most of the rest.¹⁹³

¹⁹⁴ Third, banks that acquire other banks tend to be more aggressive small business lenders than either those they acquire or comparably sized banks not involved in a merger.¹⁹⁵

TABLE 14 Small Business Loans and Dollars from Kentucky Banks, by Size of Assets		
Size of Bank	Percent of Small Business Loans	Percent Of Small Business Loan Dollars
First Quintile (Smallest 20%) Less than \$37M in assets	4.6	3.3
Second Quintile \$37M to \$64.3M in assets	11.5	9.1
Third Quintile \$64.3M to \$83.2M in assets	13.7	11.0
Fourth Quintile \$83.2M to \$140M in assets	19.4	18.8
Fifth Quintile (Largest 20%) Over \$140M in assets	48.5	55.2

Source: Kentucky Long-Term Policy Research Center Analysis of SBA data for Kentucky

In fact, some observers have suggested that mergers and acquisitions may actually increase small business financing. According to the Missouri-based Rural Policy Research Institute:

*Mergers among small banks in contiguous communities can improve the capacity of the bank to serve its community, as a result of greater financial strength, increased access to loanable funds, greater capacity to spread risk, and access to more specialized loan officer skills . . . If the credit needs of community businesses match the business focus and philosophy of the parent bank, lending in the community could increase. These mergers may benefit rural areas by bringing new banking skills and strategies to the local market, such as fee-based lending.*¹⁹⁶

Joe Peek, an economist at Boston College, and Eric Rosengren, a researcher with the Federal Reserve Bank of Boston, write, “Since acquirers are almost as likely to have larger as smaller shares of small business loans in their portfolios, compared to their targets, this suggests that not all mergers will shrink small business lending; many will actually increase it.”

Our Survey of Bankers found that nearly 60 percent of Kentucky bankers believe that further bank consolidation in Kentucky will reduce available capital for entrepreneurs. However, this view was much more strongly held by banks that *have not* gone through a consolidation within the past decade. Among those banks that *have* undergone consolidation, two thirds say bank consolidation will have no effect or will increase capital availability for entrepreneurs.¹⁹⁷ Finally, even though the number of banks has decreased in recent years, the share of small business owners who have suc-

¹⁹³ Nicholas Walraven, “Small Business Lending by Banks Involved in Mergers,” Board of Governors of the Federal Reserve System.

¹⁹⁴ J. Peek and E.S. Rosengren, “Bank Consolidation and Small Business Lending: It’s Not Just Bank Size That Matters,” NYU Stern School of Business.

¹⁹⁵ Walraven.

¹⁹⁶ Rural Policy Research Institute Rural Finance Task Force, *The Adequacy of Rural Financial Markets: Rural Economic Development Impacts of Seven Key Policy Issues* (Columbia: Rural Policy Research Institute [University of Missouri], 1997) 5.

¹⁹⁷ Banker survey (Q-3): *There were approximately 300 banks in Kentucky in 1994. If current trends continue, there will be fewer than 200 banks in Kentucky by the year 2005—a loss of more than one-third of the state’s banks. Assuming this trend continues, do you think that continued bank consolidation will mean less capital for entrepreneurs, have no impact, or result in more capital?* (Q-4): *Has your institution gone through a consolidation in the last 10 years?*

cessfully acquired capital from a bank rose from 76 percent in 1987 to 83 percent in 1995, according to the National Federation of Independent Businesses.¹⁹⁸

All of this makes a fairly compelling case that bank consolidation does not have a significant effect on small business financing. Still, many small business owners are uncomfortable with changes in the banking community. Among respondents to the 1995 National Federation of Independent Businesses survey, 25 percent reported that their primary financial institution had merged in the past three years, and many were unhappy about the consequences: 34 percent characterized the change as negative while only 7 percent viewed it as positive. Among the group responding, 17 percent reported that they had changed banks as a consequence of the merger.¹⁹⁹ Our Survey of Small Business Owners found that entrepreneurs are generally more satisfied with locally owned banks than they are with national or regional ones. Almost half rated the quality of local banks as good, while only one in four gave a similar rating to national and regional banks.²⁰⁰

While people may prefer the personalized services of local banks, their preferences have little to do with small business loans. Banks of all sizes are willing to loan capital when they are confident of a good rate of return. In fact, the real opportunities community banks hold for entrepreneurs may not be as sources of capital but as potential business ventures: the Federal Deposit Insurance Corporation reports that the number of bank charters in 1996 and 1997 was the highest in a two-year period since 1989-90.²⁰¹ Many of these businesses are started by former executives with other banks.²⁰²

¹⁹⁸ Sara Oppenheim, "Bank Financing Up, Loans from Relatives Down," *American Banker* 10 Mar. 1997: 5.

¹⁹⁹ Oppenheim.

²⁰⁰ Survey of Small Business Owners (Q-36): *Based on your knowledge and experience, how would you rate the following factors which affect the ability of entrepreneurs to launch and grow small businesses in Kentucky? Are they good, fair or poor?*

²⁰¹ Jim Jordan, "Small Banks Are Taking Big Steps," *Lexington Herald-Leader* 26 Jan. 1998: B11.

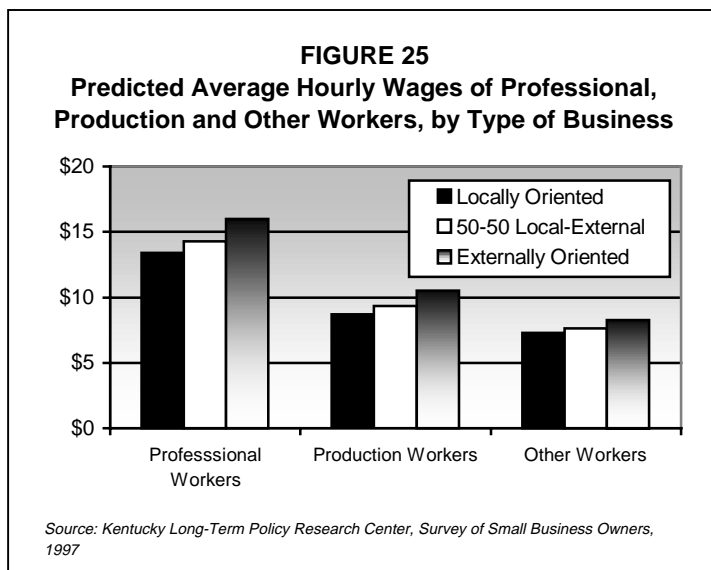
²⁰² Jordan.

Vision Beyond One's Borders

Successful young companies tend to have a broad geographic reach. Half of *Inc.* 500 companies get more than 50 percent of their revenues from sources outside their immediate region and more than a third get at least some sales from international exports. A recent Commerce Department study indicates that, largely due to the declining price of communications technology, the fastest-growing small companies are now important international traders. An estimated 10 percent of small businesses currently produce between 25 percent and 40 percent of all U.S. products and services sent abroad.²⁰³ Among the fastest growing firms in a recent national survey, nearly half (47 percent) were exporting while another 6 percent anticipated doing so within a year.²⁰⁴

Some Kentucky firms sell far beyond the Commonwealth's borders and have developed highly successful global marketing strategies. For businesses like Dippin' Dots in Paducah, which manufactures novelty ice cream products, the tastes of other cultures are fueling dramatic growth: Dippin' Dots made its second consecutive appearance on the *Inc.* 500 list this year. Kentucky's exports increased from \$4.7 billion in 1993 to \$6.9 billion in 1996, according to Mary Beth Cordy, director of the Kentucky International Trade Office.²⁰⁵ Further, Cordy notes in an Associated Press story, a recent study ranked Kentucky sixth in the nation in export growth for the first half of 1997.²⁰⁶

Growth is not the only benefit of exporting; it also tends to bring higher wages. Our Survey of Small Business Owners found that the average wages for Kentucky's professional workers, production workers, and other workers rise as businesses make more sales outside their local areas.²⁰⁷ As shown in Figure 25, wages are higher even



though these externally oriented businesses are slightly more likely to be located in rural counties than locally oriented businesses.

Despite the fact that selling beyond local borders can increase wages and sales, most of Kentucky's small businesses are very parochial. Eight out of 10 respondents to our Survey of Small Business Owners make at least three fourths of their sales locally, and 4 out of 10 make all of their

²⁰³ Brokaw.

²⁰⁴ Laura M. Litvan, "The Hot Zones for Entrepreneurs," *Nation's Business* June 1996: 42.

²⁰⁵ Bruce Schreiner, "Kentucky Exports on the Rise," *The State Journal* 9 Nov. 1997: A6-7.

²⁰⁶ Schreiner.

²⁰⁷ The model we used to estimate the relationship between wages and local sales also takes into account use of computers, location, and industry of the business. See Appendix F for model results.

sales locally.²⁰⁸ Only 15 percent of businesses make at least half of their total sales to customers located more than a one-hour drive away, and just 7 percent report making any sales abroad at all. International sales usually represent a small share of total sales. About 10 percent say they anticipate exporting their products or services in the future. However, most of these businesses are already externally oriented. Only 6.5 percent of locally oriented businesses expect to sell products abroad in the future, compared with 30 percent of externally oriented firms.

These results corroborate other studies of Kentucky's businesses. A survey of rural manufacturers we conducted in 1995 found that few businesses know much about global markets or are interested in exporting. While respondents were generally optimistic about the effects of globalization on employment and sales, they indicated little familiarity with the terms of trade agreements or with widely adopted international quality standards. Further, they reported minimal efforts to increase exports.²⁰⁹ Businesses that were already exporting were not doing much to increase their exports, and businesses that were not exporting showed almost no interest in doing so.²¹⁰ An earlier University of Kentucky study of 3,500 manufacturing firms in the state revealed that half of the firms that do not export have the potential to do so.²¹¹

Anecdotal evidence also suggests that Kentucky businesses may be too insular. A representative of one Nashville venture capital firm believes Kentucky's business culture is an obstacle to loans.²¹² This venture capitalist observed that Kentucky businesses are more inclined to stay within the family, rather than seeking the opportunity to grow and become a public company. Further, MACED concludes that regional insularity among Appalachian entrepreneurs and the community of professional service providers they rely on may limit exposure to ideas that could spawn new ventures and expand markets for established businesses.²¹³ The impact of this insularity is evident in the limited awareness of financing options and the inattention to marketing that MACED found among the Appalachian entrepreneurs it surveyed.²¹⁴ Our survey found that for half of small businesses, their five largest customers account for at least 40 percent of their total business. Eighty percent say word-of-mouth advertising has been most helpful. Simply put, one of the cultural strengths of Kentucky, an internal focus on community and family and what some have suggested is diminished interest in material wealth,²¹⁵ may limit entrepreneurial efforts in the Commonwealth.

What kind of support do Kentucky's small businesses receive if they want to sell goods and services outside of their local areas? Kentucky's externally oriented small businesses do not receive—possibly because they do not seek—much help from state and federal agencies that provide business services. For example, Table 11 on the following page shows that less than 20 percent of externally oriented firms report being somewhat familiar with the Kentucky Economic Development Cabinet, and only 7 percent say they are very familiar with it. A scant 4 percent have used its services. About 50 percent of externally oriented firms are somewhat or very familiar with the federal

²⁰⁸ In this discussion, we define local sales as those made to customers who are within a one-hour drive of the business. Locally oriented businesses are those that make at least half of their sales locally, and externally oriented businesses are those that make at least half of their sales outside of their local areas.

²⁰⁹ Peter Schirmer and Melissa Taylor, *Farms, Factories and Free Trade* (Frankfort: Kentucky Long-Term Policy Research Center, 1995).

²¹⁰ Schirmer and Taylor 29.

²¹¹ M. J. Kane, "An Assessment of the Export Potential of Kentucky Industries: A Manufacturing Profile," College of Business and Economics, University of Kentucky, Lexington, Kentucky, 1990.

²¹² The venture capital firm was contacted in a Kentucky Long-Term Policy Research Center telephone survey of regional venture capital firms.

²¹³ MACED, *Promoting Entrepreneurship* 11.

²¹⁴ MACED, *Promoting Entrepreneurship* 9, 11.

²¹⁵ Billie M. Sebastian, "Citizen Participation: An Elusive But Necessary Ingredient in Effective Government," *Foresight* (Kentucky Long-Term Policy Research Center) Fall 1994.

Small Business Administration, and 7 percent have used services provided by the SBA. Knowledge of small business assistance programs is even lower among locally oriented businesses. Only 13 percent are somewhat or very familiar with the Economic Development Cabinet and 35 percent are somewhat or very familiar with the SBA.

TABLE 15
Familiarity of Kentucky Businesses with
the Economic Development Cabinet and the Small Business Administration
(percent of respondents)

Externally Oriented Businesses				
	Very Unfamiliar	Somewhat Unfamiliar	Somewhat Familiar	Very Familiar
KY Economic Development Cabinet	59.1	14.8	19.3	6.8
E.D.C. International Trade Office	78.4	13.6	5.7	2.3
U.S. Small Business Administration	35.6	13.3	36.7	14.4
Locally Oriented Businesses				
	Very Unfamiliar	Somewhat Unfamiliar	Somewhat Familiar	Very Familiar
KY Economic Development Cabinet	71.3	15.8	11.0	1.9
E.D.C. International Trade Office	88.8	6.6	4.0	0.5
U.S. Small Business Administration	42.7	21.8	28.5	7.0

Source: Survey of Small Business Owners, Kentucky Long-Term Policy Research Center, 1997

The state agency most directly involved in promoting Kentucky's exports is the International Trade Office (ITO) of the Economic Development Cabinet. The ITO provides export consulting; documentation, shipping and regulation assistance and information; ISO 9000 (internationally recognized quality standards and practices) training; market data and other services. Only 8 percent of externally oriented businesses and 5 percent of locally oriented businesses are somewhat or very familiar with the ITO, and only a handful of small businesses say they have used any of its services.

Overall, externally oriented and locally oriented businesses are about equally satisfied (or dissatisfied) with the quality of small business assistance services. Obtaining market information is slightly more difficult for externally oriented businesses, as might be expected. Both kinds of firms rate the state's airport system about equally, too. However, externally oriented businesses are nearly twice as likely as locally oriented businesses to rate the state's highway system as poor. And externally oriented businesses are far more likely than locally oriented businesses to rate the presence of entrepreneurial role models as poor (40 percent versus 27 percent). Role models can be critical for businesses looking to expand their markets abroad. The perceived lack of role models for such businesses may impede Kentucky's ability to increase exports by its small firms.

Businesses do not have to be in urban counties to be externally oriented—in fact, they are slightly more likely to be located in rural counties. Nor do they have to be large—the average business has nine employees, just a few more than other businesses. Externally oriented businesses can be found in numerous industries—retail, construction, manufacturing, services and wholesale distributing. One noteworthy difference between externally and internally oriented businesses is that externally oriented businesses are three times more likely to be owned by someone with a graduate degree in business (15 percent versus 5 percent). Still, the overall percentage for either group is small. Despite the fact that there are few prerequisites to being externally oriented, most of Kentucky's small businesses focus on local markets.

Many of those businesses that are more externally oriented appear to “go it alone.” They do not know much about state or federal small business assistance programs. They seldom use the services of the International Trade Office. Less than 20 percent believe they have good entrepreneurial role models. However, it is an open question whether businesses actually choose to be so independent, or simply are so because of inadequate knowledge of the services that are available and the firms that have already begun selling to a national or international market.

Technology That Meets Market Needs

Information technology helps entrepreneurs communicate with suppliers, find market information, process orders from customers, and do countless other things faster. In addition to accelerating the pace of business, information technology helps businesspeople make more informed decisions. In turn, individual businesses and the overall economy are more efficient. Information technology is also enabling the rapid globalization of the economy. Producers and consumers from the most remote areas of the world are connected as never before, and information technology may have an

even larger impact on business-to-business transactions. As electronic commerce becomes the norm, customers and suppliers will expect even the smallest businesses to conduct routine business electronically.

In Kentucky, we found that use of information technology is mixed. More than four out of five small businesses use a computer, but a much lower percentage use e-mail, electronic data interchange (EDI), or electronic funds transfer (EFT). Forty percent have access to the Internet, and 10 percent have a Web site on the World Wide Web.²¹⁶ Clearly, many businesses use their computers strictly for internal functions,

such as database management, accounting and word processing, rather than taking advantage of the computer's communications capabilities.

What keeps businesses from increasing their use of information technology? By far, businesses that *do not* use computers most often indicate that they don't know what kind of hardware or software to use. They cited this obstacle 50 percent more often than cost factors. Lack of knowledge was also the most frequently cited problem for businesses that *already* use computers. They say they have trouble keeping track of all the new products that are available. A close second was the amount of time necessary to train employees to use new equipment. In other words, a lack of knowledge, rather than a lack of money, keeps businesses from using new information hardware and software. Business owners lack knowledge—they don't know what to buy—and employees lack knowledge—they don't know how to use new hardware and software.

²¹⁶

The reason this number differs so much from our estimate in Chapter 6 that no more than 1 percent of all Kentucky businesses have a Web site may be due to the fact that our small business survey included only a very small group of all Kentucky businesses, those with 20 or fewer employees that became subject to Unemployment Insurance in 1995.

TABLE 16
Information Technology Use
by Kentucky's Small Businesses

Use Computer	83.0%
Use E-mail	29.4%
Use EDI	12.3%
Use EFT	14.5%
Access Internet	41.1%
Have Web Site	10.4%
<i>Source: Survey of Small Business Owners, Kentucky Long-Term Policy Research Center, 1997</i>	

TABLE 17
How Kentucky's Small Businesses
Use the World Wide Web

Gain rapid access to business, market and regulatory information	33.7%
Research competitors	26.4%
Find new markets	25.4%
Research customer needs	23.3%
Purchase supplies or services	19.7%
Find new suppliers	17.1%
Train employees	3.1%
Other	37.3%
<i>Source: Survey of Small Business Owners, Kentucky Long-Term Policy Research Center, 1997</i>	

The barriers to technology use may, in turn, adversely affect wages. The statistical model we used to examine the relationship between wages and local sales in the previous section also suggested that wages are higher in businesses that use computers. The relationship between wages and computer use is strongest for nonprofessional and nonproduction workers (in other words, everybody else). According to our estimates, workers in businesses that use computers earn 10 percent to 20 percent more than workers in comparable businesses who do not use computers. This finding is consistent with other studies reporting that technology use on the job raises the earnings of workers.²¹⁷ At least one national study estimates that workers who use computers earn about 10 percent to 15 percent more than workers who do not use computers.²¹⁸

One of the most exciting new information technologies is the Internet, of which the World Wide Web is probably the best-known component. The Web will become an increasingly important mar-

**According to our estimates,
workers in businesses that use
computers earn 10 to 20 per-
cent more than workers
in comparable businesses
who do not use computers.**

ketplace for businesses of all sizes. Businesses that currently have access to the Web most commonly use it to gain rapid access to business, market and regulatory information. The second most common use for the Web is researching competitors. One in five businesses reports using the Web to purchase supplies or services. Although only 3 percent use the Web to train employees, that number will probably grow, perhaps rapidly, over the next few years.

Kentucky has taken a number of steps to connect the regions of the state through computer technology. The Kentucky Technology Service and the Kentucky Innovation Fund are two such initiatives. Both involve the promotion of technology dissemination and transfer throughout the state. The Kentucky Technology Service was designed to assist small and mid-sized businesses with “off-the-shelf and specialized technical, productivity, marketing, and managerial assistance” to become globally competitive.²¹⁹ The program, which was funded through a state matching grant and a federal Technology Reinvestment Project (TRP) grant, employs field engineers to work directly with firms to help them improve productivity. The program is affiliated with the National Institute of Standards and Technology Manufacturing Extension Partnership Program. The proposed Kentucky Innovation Fund is a technology investment fund that will support research and development of Kentucky’s technological infrastructure. The fund issues grants and loans for technological development of special importance to Kentucky.

Kentucky’s Cabinet for Economic Development works to disseminate EDI throughout Kentucky’s small businesses. EDI is a combination of computer hardware and software designed to link businesses through the same format for a variety of commercial exchanges, such as orders, invoices, shipping forms, and other documentation. EDI is also used by the federal government to post federal contracts that are open for bid.

An initiative to promote technology transfer, that is, the delivery of technological developments to market, involves work being done by the Kentucky Science and Technology Council, Inc. The Council was empowered to establish the Kentucky Research and Development Infrastructure, which consists of two basic research centers and several other applied centers that will work under contract with Kentucky universities. In addition, the proposed Kentucky Strategic Technology Infrastructure Fund, a technology investment fund, will support research and development of technologies of special importance to the state’s economy. Buttressing the work of the technology fund is a measure

²¹⁷ Steven G. Allen, “Technology and the Wage Structure,” NBER Working Paper #5534, 1996.

²¹⁸ A.B. Krueger, “How Computers Have Changed the Wage Structure: Evidence from Microdata, 1984-1989,” *Quarterly Journal of Economics* Feb. 1993: 33-60.

²¹⁹ Kentucky Cabinet for Economic Development, “Kentucky Strategic Plan for Economic Development: Progress Report, July 1995,” Frankfort, Kentucky.

designed to give research personnel in higher education greater opportunity to reap the rewards of their efforts. Further, the state's strategic plan for economic development attempts to address this issue through planned R&D centers across the state that will assist university researchers and faculty in bringing ideas or discoveries to market.

Abundant Social Capital

Communities make a difference in the development of small businesses. The relationships between individuals and organizations in a community can significantly influence the success entrepreneurs enjoy. Social capital, as defined by Harvard Professor Robert D. Putnam, whose book, *Making Democracy Work*, has triggered a national dialogue, is composed of "features of social life—networks, norms, and trust—that enable participants to act together more effectively to pursue shared objectives."²²⁰ Higher levels of social capital and trust in a community, both Putnam and Fukuyama assert, lower business transaction costs. Thus business development confronts fewer obstacles. High-trust societies, Fukuyama concludes, are far more likely to spawn the businesses and corporations that enable prosperity.

In many locales, social capital is manifested in a vibrant business community that eagerly extends its support to new and interested entrants. *Inc.* offers the revitalization of Houston, Texas, as an example of how an established business community shepherds new businesses into maturity, contributing substantially to the dramatic revival of this once ailing urban economy. Houston ranked fourth in 1996 among the nation's 200 largest cities in new companies created,²²¹ and some attribute its ascendance to a tightly knit network of business people who readily support and encourage new business owners.

If social capital is an asset to be drawn upon for economic development, how does Kentucky measure up? A recent survey conducted by the University of Kentucky Survey Research Center for the Kentucky Long-Term Policy Research Center suggests that the Commonwealth fares well compared with the nation as a whole in terms of trust. National survey results show that the percentage of Americans who say they trust others declined from 58 percent in 1960 to 37 percent in 1993. Kentuckians, however, express higher levels of trust. In our 1996 statewide survey, more than 56 percent of Kentuckians said they trusted people. A report on the force of social capital in Kentucky is forthcoming from the Kentucky Long-Term Policy Research Center.

While Kentucky appears to have a substantial reservoir of trust, it has not translated into widespread support for small businesses. Indeed, when we asked entrepreneurs in our Survey of Small Business Owners, "*Do you believe adequate help with starting and running small businesses like yours is available in your local community?*" rural entrepreneurs in particular found community support lacking. Only 15.1 percent of rural small business owners and just 18.2 percent of urban small business owners answered "yes." More significantly, 58.1 percent of rural respondents to this survey question said "no," compared to 43.3 percent of urban respondents while 26.9 percent of rural respondents and 38.6 percent of urban respondents said they did not know. Overall, nearly half of the respondents to this question said no, while only 16.8 percent said yes, and 34.1 percent said they did not know.

Help at the community level is not only a reflection of the community's investment in formal mechanisms for assisting entrepreneurs, such as the local Chamber of Commerce, but also of the general climate of acceptance, encouragement and support business people encounter. In order to generate a more supportive context for entrepreneurs, it will be necessary to channel more of our

²²⁰ Robert D. Putnam, *Making Democracy Work: Civic Traditions in Modern Italy* (Princeton: Princeton University Press, 1993) 35.

²²¹ Joel Kotkin, "The Best 4 Small-Business Neighborhoods in America," *Inc.* 15 May 1997.

abundant store of individual trust into community-based organizations and informal networks, and to cultivate more leaders. By doing so, we will effectively create a more entrepreneurial culture, one that recognizes, acknowledges and nurtures entrepreneurs—the foundation for robust development from within.

Public Sector Support

The public sector works to support and facilitate the development of entrepreneurship in countless but often poorly coordinated and marketed ways. From federal infusions of capital and support for technical assistance, to the tax policies of municipal and county governments, small business development and support is a perennial public sector priority. As Tony O'Reilly, Executive Director of the highly successful Small Business Assistance Corporation in Savannah, Georgia, observes,

**Because they are able to
respond more quickly to
changing market conditions,
small firms help stabilize
local economies, a vital goal
for rural communities.**

public policies now widely support entrepreneurship because the public benefit is so apparent. The development of small businesses, which do not depend heavily upon infrastructure, creates employers—not just jobs, generates tax revenues, lends support and strength to other businesses, and helps revitalize towns. And because they are able to respond more quickly to changing market conditions, small firms help stabilize local economies,²²² a vital goal for rural communities.

In spite of its importance, no single development strategy is universally appropriate or successful. Like the nation, states are comprised of numerous and diverse markets at many distinct stages of entrepreneurial evolution. Each brings assets to the entrepreneurial equation, as well as liabilities. As a consequence, O'Reilly suggests, the small business development process must flow from the political imperative to bring vigorous attention to entrepreneurship, to the development of a supportive architecture of public policy. And strategic planning must preclude program implementation if broad public benefits are to be realized.²²³

The needs of individual communities, markets and regions are unique. Indeed, this uniqueness may help explain some of the differences shown in Table 14. The state's bankers were asked if their institutions work with nonprofit, governmental or quasi-governmental agencies when putting loan packages together for small businesses and start-ups.²²⁴ These results show that eastern Kentucky banks are much *more* likely to work with nonprofits, bankers in western Kentucky and in the urban triangle are much *less* likely to work with state-affiliated regional agencies, and bankers in the south central region are much *more* likely work with other state agencies. Clearly, the roles of governmental agencies and their relationships with local banks with respect to entrepreneurial development are quite different across Kentucky's regions. These differences assuredly reflect the unique characteristics of the regions as well as the institutions involved.

²²² Tony O'Reilly, "Introduction," *Entrepreneurial and Small Business Development Strategies* (Washington: The National Council for Urban Economic Development, 1997).

²²³ O'Reilly.

²²⁴ Banker survey (Q-17).

Because the needs of communities are unique, it is widely argued that the public sector's role in development must become far less restrictive and centralized. Perhaps the only characteristic of

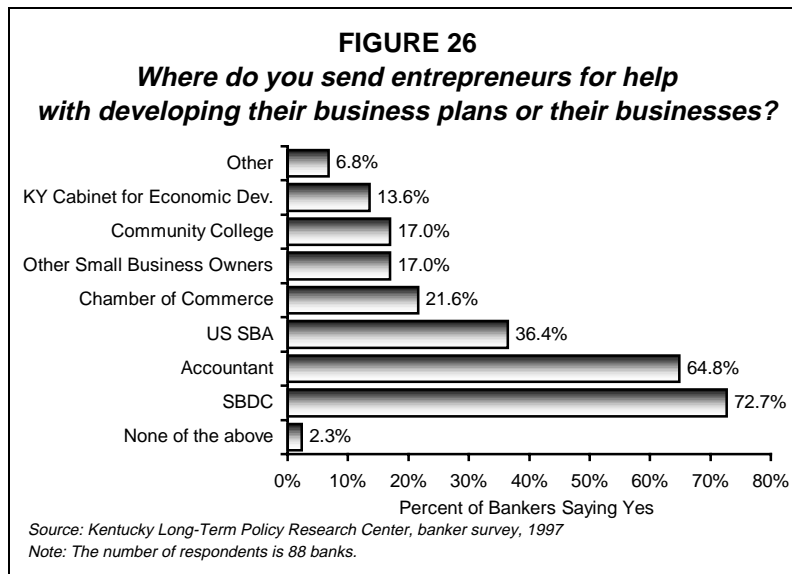
TABLE 18
Has your institution (bank) worked in collaboration with any of the following funding sources to put together financing packages for small businesses or start-ups?
 (percent saying yes)

	Nonprofits	State-Affiliated Regional Agencies	Area Development Districts	Other State Agencies	Sample Size (n)
Entire Sample	19.5	16.1	48.3	29.9	87
Rural	20.4	18.5	55.6	31.5	54
Urban	14.8	3.7	29.6	25.9	27
West Region	14.3	0	64.3	28.6	14
South Central	21.7	21.7	60.9	43.5	23
Eastern Kentucky	35.7	35.7	57.1	14.3	14
Urban Triangle	9.1	0	18.2	18.2	22

Source: Banker survey, Kentucky Long-Term Policy Research Center, 1997

public sector support for entrepreneurial development about which wide agreement exists is the need for flexibility. As we suggest in *Reclaiming Community, Reckoning with Change*, development is ultimately a product *and* an ongoing process of capacity building at the local level.²²⁵ How and what must be done can best be determined by those closest to the need for development. Rather than assuming direction of local initiatives, state government is increasingly providing funding for locally directed initiatives, serving only as a facilitator or a technical assistant to those efforts.

The public sector, however, can help build entrepreneurial capacity in a number of ways. Even the most fervent of free marketers, for example, urges public sector support for a well-developed physical infrastructure and quality educational institutions at every level. Beyond these fundamentals, public sector support for entrepreneurs includes technical assistance, financial assistance ranging from loan guarantee programs to venture capital funds, and, in some locations, the development of low-cost business space or incubators where support staff help nurture young businesses into maturity.



As Figure 26 illustrates, bankers often send entrepreneurs to public sector organizations for help with business development. Yet, the results of our Survey of Small Business Owners show that these entrepreneurs rarely go to public sector agencies or organizations when they need help. Figure 27 shows that only about 2 percent sought help from the Cabinet for Economic Develop-

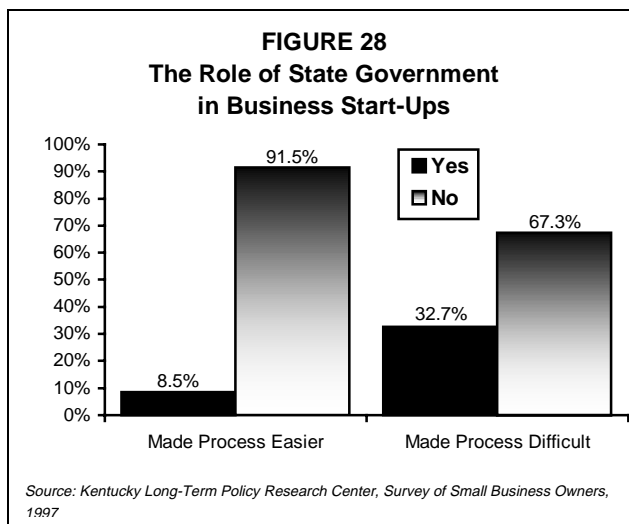
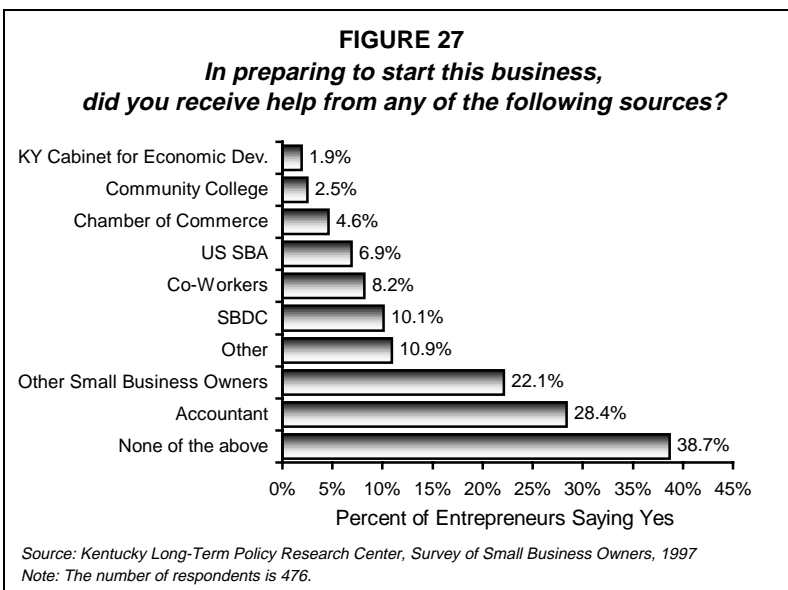
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Michal Smith-Mello, *Reclaiming Community, Reckoning with Change* (Frankfort: Kentucky Long-Term Policy Research Center, 1995).

ment and only around 7 percent went to the U.S. Small Business Administration.²²⁶

These entrepreneurs are much more likely to seek help from another small business owner or an accountant. Clearly, the relatively low percentages reflected in Figure 27 show that the respondents to this survey are not very likely to seek help from the public sector, despite the presence of a huge array of programs and agencies whose sole purpose is to help potential and existent entrepreneurs.

This low use of public agencies raises an interesting question about the role government plays in promoting small business and entrepreneurial development. Why are these entrepreneurs unlikely to seek help from the public sector? First, they frequently see government as an obstacle. When asked to identify the most significant obstacle to launching their business, 31 percent of the respondents to our 1997 Survey of Small Business Owners said “government red tape” (see Figure 19), which ranks second only to “financing” (35 percent). In fact, when asked “*Is there anything state government did when you were starting this business that made the process more difficult for you?*” an alarming 32.7 percent said, “Yes.” Of the nearly one third who said state government made it more difficult for them to start their businesses, 42.9 percent mentioned “unnecessary regulations,” 29.3 percent said taxes are too high, 22.4 percent cited “lack of information,” or “not enough assistance,” and 5.4 percent said “other.” By comparison, when asked “*Is there anything state government did when you were starting this business that made the process easier for you?*” only 8.5 percent said, “Yes.” Finally, when asked to assess the responsiveness of government agencies to the needs of entrepreneurs as “good,” “fair,” or “poor” (see Table



²²⁶ William Federhofer, District Director for the SBA, observes that the main reason this percentage is so low is because the SBA does very little direct assistance with business owners or prospective business owners. The SBDC and SCORE programs are the counseling and training programs of SBA that provide the direct assistance to those populations. Moreover, SCORE was not listed as an option to this question. In FY 97, SCORE counseled 2,048 clients and the SBDC counseled 2,604 in Kentucky.

7), 10.6 percent rated them as “good,” 47.6 percent think they are “fair,” and 41.8 percent assert they are “poor.”

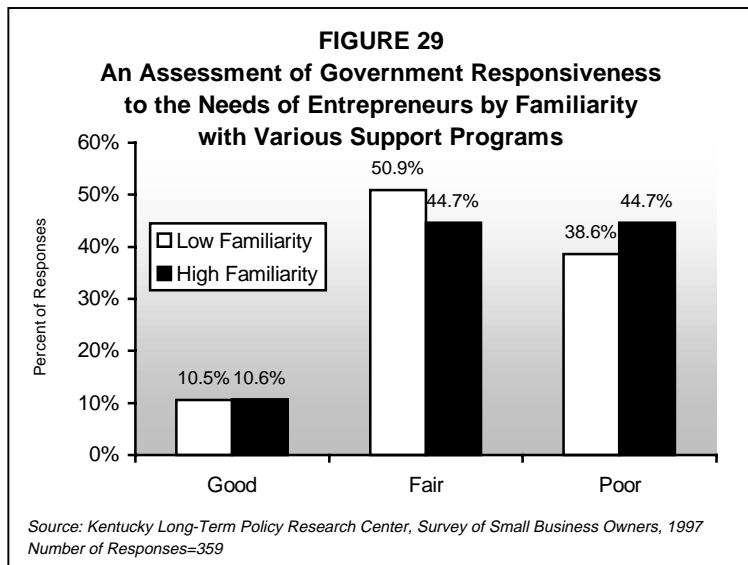
Another problem is that entrepreneurs apparently do not know about all the programs designed to support and help them. We asked the respondents to the Center's Survey of Small Business Owners

TABLE 19
How familiar are you with the programs and services to small business provided by these organizations and agencies?
(percent of respondents)

	Very Unfamiliar	Somewhat Unfamiliar	Somewhat Familiar	Very Familiar	Sample Size
Service Corps of Retired Executives (SCORE)	55.7	13.2	23.8	7.3	463
U.S. Small Business Administration	41.3	20.1	30.1	8.4	462
Small Business Development Centers	62	15.7	16.2	6.1	
Kentucky Cabinet for Economic Development	69	15.6	12.6	2.8	461
International Trade Office	86.9	8	4.3	0.9	464
Blue Grass State Skills Corporation	91.6	6.3	1.5	0.6	462
Business Information Clearinghouse	86.8	8	4.1	1.1	463
Procurement Assistance Branch	91.1	5.8	2.4	0.6	462
Business & Technology Branch	91.5	6.3	1.3	0.9	460
Commonwealth Small Business Development Corporation	86.5	8	3.7	1.9	465

Source: Kentucky Long-Term Policy Research Center, Survey of Small Business Owners, 1997

to indicate their familiarity, or lack thereof, with a variety of programs and services designed to support them.²²⁷ Table 15 shows the results of the survey. It shows that “very unfamiliar” gets the highest percentage of responses for each of these programs and services. And in most cases, the second highest rate of response is seen in the “somewhat unfamiliar” category. For example, 84.6 percent of these entrepreneurs indicated that they were either very unfamiliar or somewhat unfamiliar with the



Kentucky Cabinet for Economic Development, the primary state agency responsible for creating new jobs and new investment in the state.

Is the lack of familiarity with these public sector programs the factor that accounts for entrepreneurs giving governmental agencies such low marks for responsiveness to their needs?²²⁸ The results illustrated in Figure 29 would suggest that lack of familiarity does not account for these low marks. This figure

²²⁷ Small business survey (Q-12): *How familiar are you with the programs and services to small business provided by the following entities?* Small business survey (Q-13): *How familiar are you with the following programs of the Kentucky Economic Development Cabinet?*

²²⁸ Recall that when asked to assess the responsiveness of government agencies to the needs of entrepreneurs as “good,” “fair,” or “poor,” 10.6 percent rated them as “good,” 47.6 percent think they are “fair,” and 41.8 percent believe they are “poor.”

shows that even entrepreneurs with high familiarity²²⁹ with these programs and services are no more likely to rate them as “good.” In fact, these results seem to suggest that the opposite is true: entrepreneurs with high levels of familiarity are more likely to rate the responsiveness of governmental agencies as “poor.”

Clearly, these survey results show that governmental agencies need to market their programs and services more effectively so that entrepreneurs and small business owners know about them. However, this is not enough. With only one out of ten respondents to the small business survey assessing governmental responsiveness to their needs as “good,” it would appear that these agencies are generally not well attuned to the needs of Kentucky’s entrepreneurs and small business owners.

An area of public sector support that research shows is quite effective in nurturing small businesses is small business *incubators*. The best of these publicly owned facilities provide nascent businesses with low-cost space, access to shared business equipment and services, and guidance from experienced staff in key areas of business development. A recent study by a research team from the University of Michigan, the National Business Incubation Association, Southern Technology Council and Ohio University finds that small business incubators offer public investors big returns. Based on a survey of 126 firms that entered incubators between 1990 and 1996, the research team found that the average firm had increased sales by 400 percent since its entry into the incubator and increased jobs from 4.5 to 13. The study also found that the average cost per job created by business incubators was \$1,109, a remarkable bargain compared with the per-job price tag often attached to industrial recruiting.²³⁰ Indeed, the per-job cost is comparable to the very best public works projects funded by the Economic Development Administration (EDA) and three times better than the average, according to John Fieser, an economist with the Research and National Technical Assistance Division of EDA.²³¹ A component of the study that examined the economic impact of 23 firms in the study found they yielded a \$4.96 return for every public dollar invested.²³²

²²⁹ For each of the 10 programs and agencies listed in the small business survey under Q-12 and Q-13, the entrepreneur was given a 1 for “very unfamiliar,” 2 for “somewhat unfamiliar,” 3 points for “somewhat familiar,” and 4 for “very familiar.” If the entrepreneur circled “very unfamiliar” for all 10 programs, they received a total of 10 points. Conversely, if they indicated they were “very familiar” with all 10 programs, their total score was 40 points. The median and mean values for this new variable is 12 points. So, if an entrepreneur got 12 or less they are considered to have low familiarity. Otherwise, a score greater than 12 is considered high familiarity. Of the 533 respondents to the survey, 56.3 percent are defined as “low familiarity” and 43.7 percent as “high familiarity.”

²³⁰ Sally Hayhow, “More Bang for the Buck! Business Incubators Found to be Very Effective,” *Regional Forum* (Southern Technology Council) Fall 1997: 6.

²³¹ Hayhow 6.

²³² Hayhow 6.

As illustrated, Kentucky has only four established incubators though others, including one in Louisville and one at Kentucky Highlands Investment Corporation in London, are being launched. The technical assistance that incubators such as these provide ranges from evaluations of business ideas to hands-on training and guidance with business plan development, financing, marketing, product development, and management. Programs that help individuals assess and develop their entrepreneurial potential, many argue, make an important contribution to the economy—even when individuals opt not to go into business. Such programs, which now include some welfare recipients, help prevent business failures, loss of income and unnecessary debt, and facilitate movement into traditional employment. Further, front-end technical assistance appears to improve the viability of small firms and enable higher loan repayment rates. David Main, President and CEO of the Hamilton County (Ohio) Development Company Inc., which is rated among the top 20 in the nation, reports that since shifting to an emphasis on front-end technical assistance, the agency has had no loan defaults.²³³

The results of our survey suggest that the Commonwealth may have an insufficient level of front-end technical assistance to enable entrepreneurial development. Further, available assistance is poorly marketed and, according to entrepreneurs who are familiar with it, less than satisfactory, a circumstance that recommends reevaluation of how these services are structured, delivered and marketed.

**INCUBATORS IN
KENTUCKY**

Ashland
Ashland Business Center

Highland Heights
Small Business Incubator of
Northern Kentucky

Louisville
LCDB Enterprise Group

Paducah
Paducah/McCracken
Small Business Center, Inc.

Source: National Business Incubator Association

²³³ David Main, "Providing Technical Assistance," *Entrepreneurial and Small Business Development Strategies* (Washington: The National Council for Urban Economic Development, 1997).

Outcomes—Entrepreneurial Products

By many aggregate measures, the products of Kentucky entrepreneurship are not of the quantity nor the quality we would hope for. Instead, the state's performance by a number of traditional measures is anemic at best. As we noted previously, however, the rural character of our state and the resultant dilution of resources blur the portrait of made-in-Kentucky entrepreneurship. Because, among other things, urban populations are more educated, enjoy significantly higher earnings, and form far more businesses, the Commonwealth's poor overall performance by a number of measures is a reflection of the historic weaknesses of rural economies. Nevertheless, the products of Kentucky's comparatively weak inputs suggest real promise. Here we examine some traditional outcomes and explore the impact of the rural character of our state on selected measures.

Income

Perhaps the most significant measure of the outcomes of a state's economy is its ability to produce results in the lives of its citizens. Between 1994 and 1996, median household income in Kentucky rose at the third fastest pace in the nation (7.2 percent), but historic and persistently high rates of poverty dilute the impact of even high rates of growth. Only nine states, including neighboring Tennessee (\$30,327) and West Virginia (\$25,270), reported lower three-year averages for median household income between 1994 and 1996 than Kentucky (\$30,420).²³⁴ As previously noted, the poverty rate declined by less than a percentage point between 1995 and 1996. While this represented a decline from a three-year average of 17.9 percent between 1993 and 1995²³⁵ to 17.0 percent in 1996, the rate was exceeded or matched by only six other states and the District of Columbia, according to the U.S. Bureau of the Census.²³⁶ To close the economic gap between Kentucky and other states, it will be necessary to continue high rates of income growth, a goal that makes entrepreneurial development key to the state's future.

Seedlings

The numbers of self-employed individuals, nonfarm proprietorships and business establishments also help gauge the entrepreneurial vitality of a state's economy. Though none of these are synonymous with entrepreneurs and the data exclude farmers, they serve as reasonable indicators of entrepreneurial energy. Self-employed individuals and nonfarm proprietorships, for example, represent what the Kentucky Science and Technology Council terms the entrepreneurial supply market or the seedlings of new enterprises. These are typically very young firms with no business plan or institutional sources of capital. Many self-employed individuals work from their homes, more than 4.1 million nationally.²³⁷ Though they ordinarily serve local markets exclusively and do not offer substantial potential for expansion, growth in their numbers may indicate the entrepreneurial vitality of a state. If the climate is conducive to entrepreneurship, the number of people willing to accept the risks

²³⁴ U.S. Bureau of the Census, *March 1997 Current Population Survey* (Washington: U.S. Department of Commerce, 1997).

²³⁵ U.S. Bureau of the Census, *Poverty in the United States: 1995*, Series P60-194 (Washington: U.S. Department of Commerce, 1996).

²³⁶ U.S. Bureau of the Census, *Annual Demographic Survey, March Supplement* (Washington: U.S. Department of Commerce, 1997).

²³⁷ Bureau of Labor Statistics, "Work at Home in 1997" (News Release), U.S. Department of Labor, Washington, DC 11 Mar. 1998.

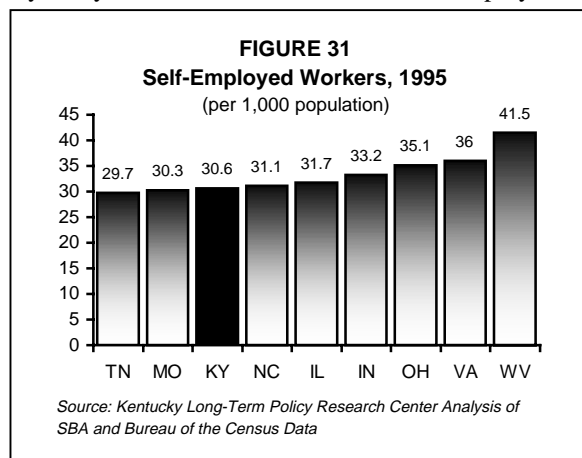
of running their own microenterprise, it would seem, multiplies. As illustrated in Figure 30, the number of self-employed individuals in the United States has been steadily increasing since the late 1960s.

The number of self-employed workers in Kentucky, as illustrated in Figure 31, is estimated to be comparable to those in surrounding states. As shown, Ohio, Virginia and West Virginia have more self-employed workers per 1,000 population, an outcome that suggests mixed interpretations of these data. While Virginia and Ohio have successful entrepreneurial economies, West Virginia's high population of self-employed workers may be a consequence of limited employment opportunities.

Accordingly, an important caveat about self-employed workers should be noted. Carlos Craycraft, a labor market analyst with the Division of Employment Services, observes that it is generally theorized that a robust economy such as today's attracts more individuals to formal employment opportunities. Conversely, economic downturns force more individuals to generate income through self-employment. The frequently



informal or off-the-books nature of self-employment complicates the already difficult task of capturing data about these individuals. Consequently, Craycraft terms estimates of the self-employed in Kentucky as less than reliable. Ironically, according to Craycraft, at a time when self-employment is increasing nationally, the Bureau of Labor Statistics, to which the Division of Employment Services reports, has established no new methodology for collecting data about this important employment sector to replace one that is no longer used. Employment Services estimates that Kentucky's self-employed population increased 4.6 percent between 1994 and 1996, from 123,679 to 129,405. However, the Small Business Administration estimates the state's 1996 self-employed population at 113,000.



Total nonfarm proprietors' income in Kentucky was among the lowest in the southeast region and among surrounding states in both 1994 and 1995, according to the Bureau of Economic Analysis. Only Mississippi and South Carolina in the Southeast and surrounding states West Virginia and Missouri registered lower nonfarm proprietors' income levels in 1995. However, Kentucky's rate of growth in nonfarm proprietorship income between 1994 and 1995 (8.6 percent) exceeded the national average (8.0 percent) and was ranked 19th nationally.²³⁸ Again, the state's relatively low income levels are reflected in proprietorship income, just as they are in virtually every measure of economic well-being in the Commonwealth. So long as incomes are diminished, the proprietors of small businesses and microenterprises can expect their earnings to be adversely affected. In short, dramatically reducing poverty is in everyone's best interest.

²³⁸ USSBA, "Small Business Economic Indicators," online, USSBA Office of Advocacy, Internet, Aug. 1997.

A fairly steady stream of new firms has emerged annually in Kentucky, ranging from a low of 7,406 in 1985 to a high of 9,078 new firms in 1995. Between 1994 and 1995, the number of new firms increased by 12.6 percent, ranking seventh in the nation, according to the SBA's Office of Advocacy, a growth rate in which the Corporation for Enterprise Development sees strong development potential.²³⁹ According to recent SBA figures, in addition, Kentucky ranks 44th in the number of new firms per 1,000 population. To many, these SBA figures confirm Kentucky's inability to create, nurture and grow high-performance companies. However, if we rank the number of new firms per 1,000 urban population, Kentucky moves from 44th to 23rd.

While Kentucky ranked 13th nationally in the percent of change in small business bankruptcies between 1994 and 1995, 11 states experienced essentially the same .6 percent rate increase, which was below the national average of .8 percent. Over the course of the 1985-1995 decade, according to SBA, bankruptcies among Kentucky small businesses have essentially been cut in half, from 997 in 1985, to just 473 in 1995. Business failures in Kentucky have seesawed somewhat over the last decade, from 983 in 1985, to a high of 1,234 in 1991, to a low of 322 in 1993. Between 1993 and 1994, they more than doubled but dropped again in 1995 to 663, for a ranking of 34th in the percent change in business failures between 1994 and 1995. Further indication of rising business stability is seen in the number of business terminations in Kentucky, which reached a decade low of 9,307 in 1995, compared with 10,385 in 1985, and a high of 11,276 in 1990.

Initial Public Offerings

Those enterprises that accumulate sufficient capacity to make an initial public offering (IPO) of stock in their companies are able to achieve very rapid growth. But IPO data is, at best, an imperfect measure of a state's entrepreneurial capacity. As Harvard Professor and MACED's Innovator in Residence Greg Dees observes, a measure of self-selection is involved based on the growth objectives of a firm. The very nature of some businesses precludes the need to go public in order to generate capital to finance growth objectives. Additionally, IPO data by states in which firms are incorporated rather than headquartered, for example, may be primarily a reflection of the tax and regulatory environment of that state, rather than its entrepreneurial capacity. Indeed, only a tiny fraction of some of the fastest growing companies in the nation opts to go public. Most simply never become large enough to issue an IPO while others choose to remain private.

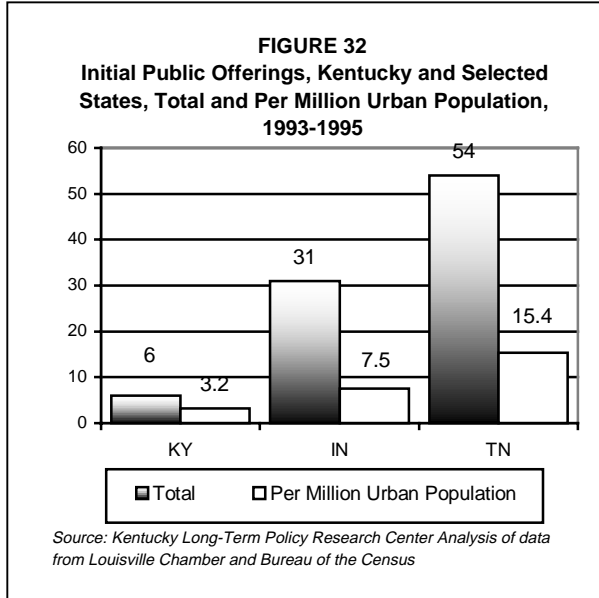
In 1996, *Inc.* magazine published a progress report on its 1985 class of *Inc.* 500 firms, an annually compiled list of the fastest growing U.S. firms. Among the 1985 *Inc.* 500, 48 percent of the firms were still privately held, but only 6 percent had gone public even though these select firms were far more likely to go public than the average U.S. firm.²⁴⁰ Though only a small percentage of the 1985 *Inc.* 500 class went public, those firms that did—including Microsoft—enjoyed dramatic growth, growing by \$18.9 billion in revenues and creating almost 60,000 new jobs.²⁴¹ Clearly, publicly traded growth companies are, as the Louisville Area Chamber of Commerce observes, powerful engines of economic growth. Their presence serves as a measure of a state's success in creating and supporting successful entrepreneurial ventures. In 1993 and 1994, according to the Securities Data Company, the United States had \$70 billion of initial public offerings, as much as in the previous six years combined.

²³⁹ USSBA, "Small Business Economic Indicators."

²⁴⁰ Martha E. Mangelsdorf, "The Startling Truth About Growth Companies," *Inc.* 15 May 1996: 84-91.

²⁴¹ Mangelsdorf.

The recent contributions of companies headquartered in Kentucky, however, have been somewhat anemic. Between January 1, 1993, and December 31, 1995, only 6 companies headquartered in Kentucky went public compared with 31 in neighboring Indiana and 54 in Tennessee.²⁴² However, when examined in light of Kentucky's "ruralness," a far less damning performance emerges. As



shown in Figure 32, a simple comparison of total numbers finds Indiana with five times and Tennessee with nine times more IPOs than Kentucky between 1993 and 1995. However, after controlling for the Commonwealth's high rural population, the differences narrow considerably. Indiana had 2.3 times and Tennessee has 4.8 times as many IPOs during the given time period. More recently, however, Goetz and Freshwater report for the Kentucky Science and Technology Council that Kentucky ranked 17th in the nation in critically important technology-sector IPOs per million persons during 1996 and 1997. Importantly, only 23 states reported at least one filing for technology IPOs during this time period.²⁴³

²⁴² Louisville Area Chamber of Commerce 7.

²⁴³ Goetz and Freshwater.

Inc. 500 Companies

Since 1982, *Inc.* magazine's annual *Inc.* 500 list has provided a compendium of the nation's fastest growing firms ranked by their rate of growth. Again, this widely used measure of entrepreneurial capacity is less than perfect because significant self-selection is involved. Companies apply

for inclusion on this annual "who's who list" of entrepreneurs, and the information they submit is independently verified by certified public accountants who review tax records and other documents. Further, *Inc.* looks only at the growth rates of independent, privately held firms that had a minimum base of sales revenue five years prior to the list's compilation. In 1997, for example, applicant firms were required to have 1992 sales of \$200,000.

Firms that seek inclusion on the annual *Inc.* 500 list may do so to heighten their presence in the marketplace and broaden their customer base or, perhaps more importantly, to attract capital from venture firms or other investors. Some firms, like Tekno in Cave City, which designs and builds automated manufacturing systems, and Louisville-based Tova Industries, which manufactures dehydrated food products, have made multiple appearances on the *Inc.* 500 list. But many high-growth companies simply never bother to apply for recognition of their high-growth status.

In spite of its limitations, the *Inc.* 500 list indicates the aggressiveness of the entrepreneurial community in a state. However, the aggregate number of appearances on the *Inc.* 500 list tells us little. The number of appearances is a reflection of a state's population and, we find, the level of urbanization of its population. In an analysis of *Inc.* 500 firms in all 50 states, we found a strong bias toward urban centers. Indeed, there is an almost perfect correlation between a state's level of urbanization and how many *Inc.* 500 companies it has ($r=D.91$).²⁴⁴

Kentucky not only has a far smaller population, it is a far more rural state than the

K E N T U C K Y

The 1997 *Inc.* 500

42

Wyncom, Inc.
Lexington, Kentucky

Provides educational and professional development services.

5-Year Track Record:

3100% growth

Revenue: \$1.2 million>\$41.5 million

Employees: 12>100

160

Software Information Systems, Inc.
Lexington, Kentucky

Provides computer software consulting services.

5-Year Track Record:

1300% growth

Revenue: \$.5 million>\$7.4 million

Employees: 9>24

237

Accent Systems, Inc.
Nicholasville, Kentucky

Provides system integration services.

5-Year Track Record:

1000% growth

Revenue: \$.6 million>\$7.7 million

Employees: 8>26

331

Dippin' Dots, Inc.
Paducah, Kentucky

Makes novelty ice cream products.

5-Year Track Record:

800% growth

Revenue: \$1.2 million>\$11.7 million

Employees: 30>65

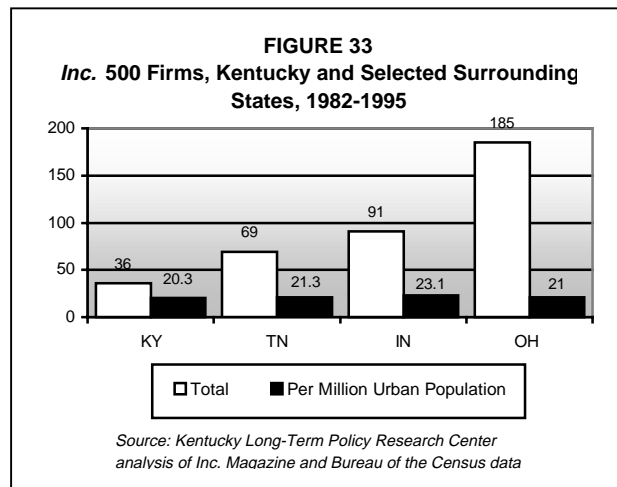
Source: Inc. Magazine

²⁴⁴ We did not include California in the analysis because it is an egregious outlier. If California is included, however, the correlation (Pearson's r) is still quite high at 0.85. The number of *Inc.* 500 companies is the average number of *Inc.* 500s in the state during 1984, 1989 and 1994. The population number is the average from 1985, 1989 and 1993. The percentage urban is the average from 1980 and 1992.

larger community of states surrounding it. Only West Virginia has a smaller population and a smaller portion of its population living in metropolitan areas, 40.8 percent versus 48.5 percent in Kentucky. By contrast, neighboring Ohio (11 million; 81.3 percent urban) is among the most populous and most urban states in the nation. In the Southeast, only Florida is more populous and more urban than neighboring Virginia (6.4 million; 74.2 percent urban). The sheer volume of high-growth Virginia firms appearing on this annual list serves to illustrate the magnetic power of urban centers, in this case, the Washington, DC, metropolitan area where a substantial portion of the state's *Inc.* 500 firms are based.

Figure 33 compares the *Inc.* 500 performance of Kentucky firms with that of firms in selected surrounding states in light of metropolitan population. As shown, the wide disparity indicated by totals alone disappears completely when these data are controlled for urban population. Indeed, these data suggest that Kentucky possesses strong entrepreneurial capacity. Consequently, a measure often used to illustrate Kentucky's entrepreneurial weaknesses reveals a far different picture, one of considerable strength, when examined in light of urban population.

As in the rest of the nation, Kentucky's *Inc.* 500 firms have been concentrated heavily in the state's urban triangle formed by Northern Kentucky, Louisville, and Lexington. Given the strong urban bias of the *Inc.* 500, the inclusion of such firms as Tekno in Cave City (1994, 1995 and 1996), Halton Company in Glasgow (1995), which designs and manufactures ventilation hoods for commercial kitchens, and Dippin' Dots in Paducah (1996, 1997), which manufactures novelty ice cream products, shows entrepreneurial strength in regions generally underrepresented on this annual list. Consequently, Kentucky's show of entrepreneurial strength in what would ordinarily be regarded as unexpected places, namely rural areas, may suggest enormous potential.



Conclusion

Arguably, the current pace of income growth in Kentucky is attributable to the state's diverse, small business-dominated economy, which is enjoying increased stability and growth in today's robust national economy. In order to capture more of the Commonwealth's development potential, sustain recent rates of income growth and broaden its impact, it will be necessary to enhance the entrepreneurial capacities of individuals and communities. To do so, Kentucky must substantively improve the critical raw material of entrepreneurial development in this state. The preparation that educational institutions at all levels provide for the era of entrepreneurship in which we live, for example, is key to the ability to generate innovation and execute ideas. Moreover, our focus on services that are key to the cultivation and development of entrepreneurs and small businesses must be broadened.

Ultimately, we must fashion a development policy that not only recognizes the vital role that development from within plays in the economic health of our state but also works on a range of fronts to advance it. Through efforts that combine local, regional and state resources, we can liberate more innovative ideas, nurture them into fruition, create jobs in unexpected and unlikely places, and raise income throughout the Commonwealth. These efforts are especially likely to be of benefit to rural communities, for which too many leaders see migration to urban centers as the only solution to economic woes.

Trends Influencing Entrepreneurial Development

The road up and the road down is one and the same.
Heraclitus, c. 540 - c. 480 B.C.

Change offers us a choice. We can rail against it or make it work for us. We can resign ourselves to its unceasing consequences, or we can, as Heraclitus suggested, take the road up. To prosper in the years ahead, we cannot view change solely as the unsettling and uncomfortable force it often is. Rather, we must see in it the chance to transform our economy, to repair its inequities and to create enduring prosperity. Regardless of the sector in which we work—public, private or nonprofit—we must wrest as much public good and private profit from change as is possible. To do so, we must anticipate what lies ahead. We must, as Peter Drucker suggests in his 1995 book, *Innovation and Entrepreneurship*, listen carefully, ask questions, watch for opportunities and act nimbly and quickly when they appear. In short, we must become more entrepreneurial in all that we do.

Here we look at but a few of the trends that will influence our ability to cultivate an entrepreneurial economy in Kentucky. They include larger economic and demographic trends that are well underway, the expansion of the World Wide Web, and a rising commitment to microenterprise development.

"The Future That Has Already Happened"²⁴⁵

As Drucker suggests, some forces that are already very much with us will have a predictable effect on our future. About what lies ahead, some things are virtually assured. Global trade—for better or worse—will continue to exert profound influence on our lives. The intense competition it has fostered will continue to force organizational rethinking and restructuring, which, in turn, will scatter more people into the marketplace and will likely continue fueling the trend of decentralization now so evident in employment patterns. A growing number of responsibilities once assumed by employers, from retirement planning to health care choices, are being transferred to individuals, creating entrepreneurial opportunities and compelling individuals to bring a new level of personal engagement and knowledge to life choices. Central to the challenge of development is preparing people for these new demands through workforce training and education that will enable ready adaptation to change.

All the while, technology will continue to produce dramatic, even revolutionary change. Regardless of where we live, it will alter virtually everything in the world around us, as certainly as it created the World Wide Web of communications that now knits the planet together. Gradually, this web will become the marketplace of the world, just as the tools driving it have become the engines of our economy. Computers are the field of a remarkable 36 percent of the fastest growing companies in the United States as identified by *Inc.* magazine for its 1997 *Inc.* 500 list; another 9 percent

²⁴⁵ Peter F. Drucker, "The Future That Has Already Happened," *Harvard Business Review* Sept.-Oct. 1997: 20.

are in telecommunications.²⁴⁶ Today, many argue that information technology will fuel virtually limitless economic growth in the years to come, spreading prosperity and advancing human development at a remarkable pace. Clearly, information technology is democratizing entrepreneurship, extending the possibility of business ownership and success to all who bring creativity and innovation to the marketplace.

Because more and more businesses, large and small, rely on access to a high-quality technology and communications infrastructure, it has become as central to the work of development as highways and water and sewer lines, particularly in those rural areas that are often left behind. Indeed, a state-of-the-art electronic infrastructure opens a window to new markets, ideas and innovations,

As Baby Boomers move into their retirement years, they will create new consumer demands as well as entrepreneurial opportunities to meet them.

competitive sources of supplies and services, cost-saving electronic exchanges, and more. Further, it allows many rural enterprises to become players in the larger economy despite the "distance penalty" often imposed by traditional physical infrastructure.

Like globalization and technological advancement, widely anticipated demographic changes will continue to alter the

face of our population, as well as the circumstances of our lives. In turn, business will also change. As Baby Boomers move into their retirement years, they will create new consumer demands as well as entrepreneurial opportunities to meet them. At present, unexpected population growth due largely to migration into Kentucky, particularly among retired natives of the state, and sustained economic health, are buoying even rural economies.

If the return-of-the-native demographic trend holds, it bodes well for entrepreneurial opportunity throughout much of Kentucky. Retirees as well as other demographic groups are creating new markets in the state, a possible forerunner of the "demographic Balkanization" University of Michigan Professor William Frey predicts.²⁴⁷ Frey suggests that regions will become magnets for particular demographic groups, creating distinctive marketplaces and business opportunities. As examples, he suggests already emerging multilingual immigrant ports and locales that attract "middle-class domestic relocators seeking more suburban family lifestyles,"²⁴⁸ a regional identity that parts of Kentucky have arguably already assumed. As distinct regional identities emerge, market demands unique to the socio-economic status of their residents will increase as well, creating identifiable business niches and opportunities. Indeed, many advise would-be entrepreneurs to look first to their home community for business ideas.

Because older, less risk-inclined people are generally not likely candidates for entrepreneurship, Kentucky's aging population might be expected to dilute entrepreneurial energy. But the dynamics of aging are changing. Older citizens are more educated, in better health and more active than ever before. While the vast majority (82 percent) of 1997 *Inc.* 500 CEOs were under 50 years of age, 13 percent were between the ages of 51 and 60, and 5 percent were 61 or older.²⁴⁹ As employment patterns continue to decentralize, the replacement population of youth declines nationally, and more shortages of skilled workers emerge, the knowledge and experience that older citizens bring to the marketplace are likely to become increasingly valuable commodities. Aided by the benefits of accumulated wealth and skill, more older citizens are likely to assume entrepreneurial roles in the years to come. Still others, the Kentucky State Data Center finds, are remaining in or returning to

²⁴⁶ *Inc.*, "A Statistical Tour."

²⁴⁷ Altobelli and Hopkins, "The Next Big Things," *The State of Small Business 1997* (*Inc.* Magazine): 146.

²⁴⁸ Altobelli and Hopkins.

²⁴⁹ *Inc.*, "A Statistical Tour."

the labor force beyond retirement age due to the inadequacy of retirement provisions,²⁵⁰ a trend that is likely to persist and broaden. RAND demographer Peter Morrison predicts, “The elderly will live much longer lives—outliving their retirement savings.”²⁵¹ For many, entrepreneurial ventures will supplement retirement income.

In addition to the aging of our population, the growing predominance of time-pressed, two-wage-earner households is expected to continue driving a high demand for products and services that enable greater convenience. Eating and drinking establishments are predicted to create more than 1,000 jobs a year in Kentucky between 1994 and 2005 for waiters and waitresses alone.²⁵² Many of these low-wage, service industry workers will join the lower half of an economically divided population that has emerged, with a “cost-is-no-object” group on one end and a “cost-is-the-object” group on the other. Consequently, entrepreneurs who create desirable, unique *and* costly products and services will likely find a market. At every income level, however, consumers will continue to make more refined decisions, enabled by information and motivated by the desire for products of quality that will last. Cost and quality will matter more and more.

Our willingness to understand these trends and many other forces influencing our future *and* to respond to them nimbly will ultimately determine whether Kentucky lifts itself out of a century-long tradition of economic disadvantage or remains anchored to a past of poverty and underdevelopment.

²⁵⁰ Charles Wolfe, “Lack of Money Keeping More Older People in Work Force,” *The Lexington Herald-Leader* 24 Oct. 1997: B4.

²⁵¹ Altobelli and Hopkins.

²⁵² Employment Services 12.

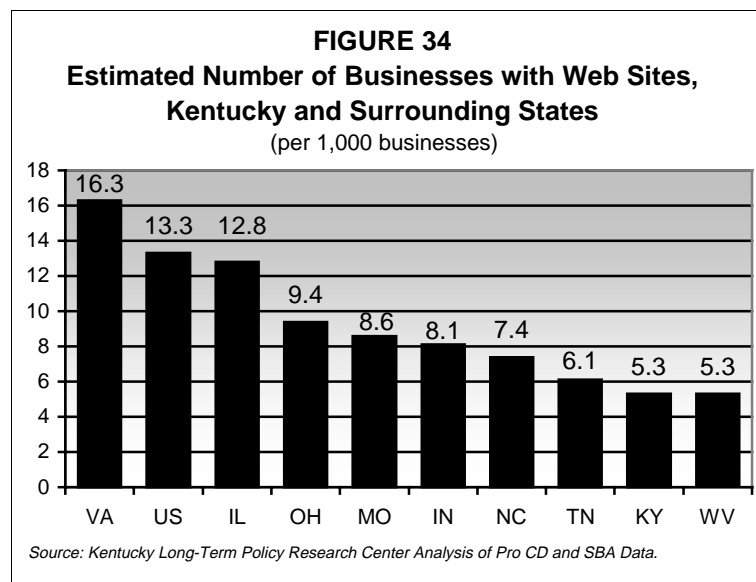
Doing Business on the World Wide Web

Perhaps the most important innovation for business in the 1990s is the World Wide Web. It literally did not exist a decade ago, but furious competition among information technology companies has led to rapid improvements in the capabilities of the Web. Today, users can view live video, listen to live audio, exchange information and ideas in "real time," and make purchases online in a relatively safe environment. One of the great strengths of the Web is its absence of borders. Customers can make purchases from a company without ever knowing where it is located; it could be two blocks down the street or halfway around the world.

Online shoppers are on the rise, as are online revenues. One market research firm reports that the percentage of Web users who make purchases online rose from 19 percent in 1995 to 27 percent in 1997.²⁵³ Another market research firm estimates that online transactions will total \$9 billion in 1997.²⁵⁴ And many of the people who don't make purchases online still use the Web to research products or services they want to buy. In fact, more than 20 million Americans have come to view the Internet as an indispensable part of their lives.²⁵⁵ Such a powerful tool could be a tremendous

help to Kentucky's businesses, particularly rural ones far from major markets.

But are Kentucky firms using the World Wide Web to sell their products? A few are. No directory of Web addresses is complete, so we can only estimate the number of Kentucky businesses with Web sites. During the spring and fall of 1997, we purchased a commercial listing of URLs and conducted our own exhaustive search of the World Wide Web. We found 1,366 Web sites for businesses based in



the Commonwealth. Kentucky has about 80,000 firms with employees and approximately 113,000 self-employed persons.²⁵⁶ At best, our estimates suggest that less than 1 percent of Kentucky businesses had a Web site at the time these data were collected though, as shown in the illustration of the chronology of Kentucky web sites on the following page, the numbers are expanding rapidly. Our analysis of 1990-1996 data on registered web sites collected by the Danvers, Massachusetts firm, Pro CD Inc., found that while the number of sites has expanded dramatically in Kentucky, the

²⁵³ "Beyond the Hype: Internet 'Indispensable' to Many, Disposable to Others," online, Internet (available at: www.finsvp.com/0506.html) 2 Feb. 1998.

²⁵⁴ Forrester Research as cited by CommerceNet, online, Internet, 2 Feb. 1998 (available at: www.commerce.net/stats/indust.html#ec).

²⁵⁵ "Beyond the Hype . . ."

²⁵⁶ The Department of Employment Services, Cabinet for Workforce Development, estimates Kentucky's self-employed population for 1996 at more than 129,000, but cautions against relying on these estimates. Here we use SBA estimates.

number of businesses with a web site is one of the lowest among surrounding states (see Figure 34).²⁵⁷ Consequently, Kentucky businesses are moving more slowly than those in surrounding states to seize the opportunities and the competitive edge that a presence on the World Wide Web enables.

We surveyed the Kentucky businesses we found in our search of the World Wide Web and asked them where they are, who they are, how they benefit from having sites on the Web, how they developed their sites, what the sites cost, and how they use the Web to sell products. We mailed surveys to 719 Kentucky businesses with Web sites and received responses from 408, a response rate of 57 percent. In this section we present the results of what may be the first statewide survey of Kentucky's businesses on the World Wide Web.

Who's Using the Web?

Kentucky's business establishments are concentrated in the Lexington-Louisville-Northern Kentucky triangle, so it is no surprise that a majority of Kentucky's businesses on the Web are based in this area. Jefferson County alone is home to 41 percent of the 1,366 known Web businesses, 14.5 percent are in Fayette County, and 9.5 percent are in Boone, Campbell and Kenton counties. Nearly two thirds of Kentucky's Web businesses are in these five counties. Yet the five counties are home to only 30 percent of the state's population and 40 percent of the state's businesses. (See Map 2)

But a handful of rural counties have a higher percentage of businesses on the Web than Lexington, Louisville, or Northern Kentucky. In 1995, the most recent year for which establishment data are available, Lyon County had 173 firms with employees, and it has 12 known Web businesses, the highest ratio of Web businesses to total firms for any county in the state. Elliott, Henry and Boyle counties also have high ratios of Web businesses to total firms. For its size, the town of Berea also has many Web businesses. The relatively large number of Web businesses in at least two of these rural areas—Lyon County and Berea—is partly explained by the presence of a local business or organization that has created a community business directory to act as host to other businesses.

Web businesses are sparse in eastern and south central Kentucky. More Web businesses are located farther west, in Bowling Green, Owensboro, Henderson, and Paducah. Rowan County and Calloway County, homes to Morehead State University and Murray State University, also have several Web businesses.

Kentucky's Web businesses range from the very small (one in three has fewer than 5 employees) to the very large (12 percent have 100 to 500 employees and 4 percent have more than 500). They also sell almost every product and service imaginable. Table 20 lists the percent of survey respondents who sell selected goods and services. Among the goods and services submitted in the "Other" category are aquarium maintenance, conveyor belts, Thoroughbreds, mattresses, Civil War relics, teddy bears, comic books, bags, industrial steam boilers, clay, jewelry, carriage services, aerial im-

.com Comes of Age	
A Chronology of the Registration of Kentucky Business Sites on the World Wide Web	
1990	1
1991	2
1992	4
1993	11
1994	55
1995	669
1996	1,018
TOTAL	1,760

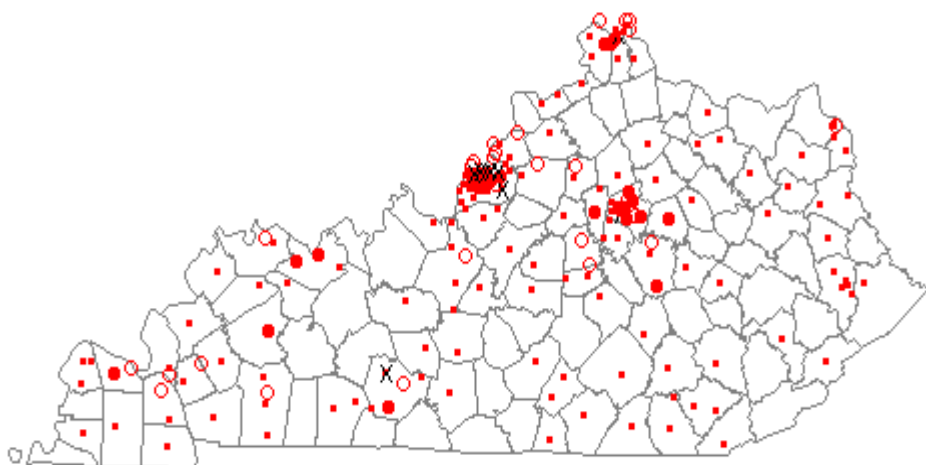
²⁵⁷ The number of web sites was obtained from the PRO CD Internet Directory of over 450,000 web addresses (Pro CD Inc., Danvers, MA). These are web addresses that were registered between 1990 and 1996. We excluded inactive and non-commercial sites (e.g., *.net, *.org, *.edu, etc.) as part of our search criteria and found 1,009 Kentucky businesses with a web address. One should note however that an examination of the listings reveals duplicates for some businesses, but this duplication does not appear to be widespread. The total number of businesses is the sum of self-employed and businesses with employees in 1996. These data were obtained from the SBA state profiles (<http://www.sba.gov/ADVO/stats/profiles/>). According to SBA, Kentucky was home to 78,044 businesses with employees and approximately 113,000 self-employed persons in 1996, for a total of 191,044 businesses. Finally, for our purposes the relative differences between the states are more important than the absolute number of web sites per 1,000 businesses because the Web is changing and evolving so rapidly that any attempt to describe a "snapshot" is outdated immediately.

agency, expert witnesses, game tickets, land surveying, bows for dogs, auction services, biological reagents, and business consulting.

TABLE 20			
Goods and Services Sold by Kentucky's Web Businesses			
Goods	Percent that sell it	Services	Percent that sell it
Computer Software	14.5	Computer Consulting, Web Design	21.8
Computer Hardware, Communication Equipment	12.7	Travel and Tourism	10.8
Books, CDs, Magazines, Other Published Items	11.8	Financial	8.3
Arts & Crafts	8.1	Engineering	4.2
Food	4.7	Real Estate	3.4
Clothing	3.9	Medical	3.2
Agricultural Products	3.7	Accounting	2.7
Health Care Products	3.4	Agricultural	2.7
Transportation Equipment	2.5	Child Care, Cosmetology, Other Personal Services	2.5
Other	38.0	Other	33.4

Source: Survey of Small Business Owners with Sites on the World Wide Web, Kentucky Long-Term Policy Research

Map 2
Kentucky Businesses With Web Sites
1,366 Web Businesses Found, Summer 1997



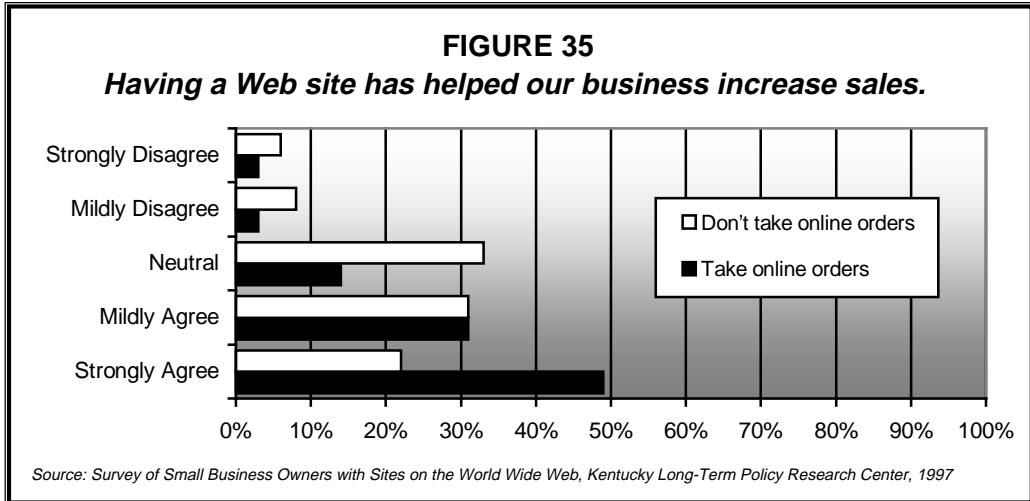
- 1 to 5 Businesses
- 6 to 10 Businesses
- 11 to 25 Businesses
- X Over 25 Businesses

Web Site Benefits

Three fourths of Kentucky's businesses with Web sites believe the World Wide Web has helped them, and nearly all believe that the Web will help them over the next five years. More specifically, a little more than half of the businesses believe having a Web site has increased sales, helped them sell to people in new geographical areas, and helped them sell to new kinds of customers. However, these were not the most commonly mentioned benefits; 84 percent of these business owners said having a Web site enables them to provide information about their products and services, 80 percent said it enhances their market image, and 62 percent said it helps them retain and attract customers. Only one in five said having a Web site reduces costs.

Perhaps one reason more businesses do not believe having a Web site has increased sales is that customers are still concerned about security. As the technology improves, though, more people will be making purchases online. Presently, 14 percent of Kentucky's Web businesses have a secure link that allows customers to submit a credit card number and other personal information. Online sales are not brisk. Two thirds of the firms that accept orders online estimate that less than 10 percent of total revenue comes from Web sales. Nonetheless, one out of ten estimates that Web sales account for at least 40 percent of total revenue, and more than one quarter expects to receive at least 40 percent of total revenue from Web sales within the next 10 years.

Firms that take orders online are far more likely to believe that sales have increased as a result of their Web site: 49 percent strongly agree that having a Web site has increased sales, while only 22 percent of those firms that do not take orders online strongly agree. However, setting up a secure site to accept credit card numbers and other personal information is more complicated and may be more expensive than just putting a Web page on a server. Firms that accept secure Web orders paid Web developers about 25 percent more to have their sites set up.



The benefits of having a Web site vary somewhat depending on the industry of the business. Those in the tourism industry are the most likely to say that sales have increased as a result of the Web site; about a quarter of these businesses believe online transactions will account for at least 40 percent of their business within the next 10 years. "We have had more calls on our B&B (bed and breakfast) through the Internet than any other source," wrote one small business owner. Tourism businesses were also the most likely to say that having a Web site has helped reach customers in new geographical areas.

On the other hand, businesses that offer medical services or professional services, such as accounting, banking, engineering and financial services, are the least likely to say that sales have increased as a result of the Web site. Nor are they particularly optimistic that online sales will increase

appreciably. These businesses see their Web sites more as a way to enhance their professional image and to recruit employees. They were twice as likely as other firms to say that their Web sites help them with hiring.

Exactly half of the agricultural and arts and crafts businesses say that having a Web site has increased sales. Arts and crafts businesses were the second most likely (after tourism businesses) to say that their Web sites have helped them find customers in new geographical areas. Interestingly, though, arts and crafts businesses are the least likely to agree that having and maintaining a Web site is worth the cost.

Computer- and Internet-related businesses enjoy many benefits from having a Web site. They are the most likely to say a Web site enhances their market image, and they are by far the most likely to say that their Web sites enable them to improve customer service. One third say their Web sites reduce costs, 20 percent say their Web sites help them recruit employees, and nearly 80 percent say that within the next five years having a Web site will be worth the cost. That is considerably higher than almost any other group.

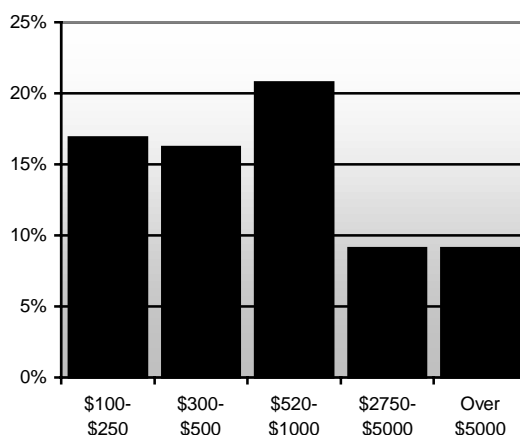
Although the numbers sound good, nothing is as compelling as success stories like that of Lexington-based Moore Diversified Products. The company invented a product that enables apartment managers to monitor utilities, security systems and other electronic functions using a cable TV network. Sales of the RUM540 were slow until Moore advertised the product on its Web site. Now, the product is used in several states and in China, Ireland, Brazil and the Philippines. The Chinese alone expect to buy \$3 million worth of RUM540s a year.²⁵⁸

In general, it would appear that most businesses are satisfied that they benefit from having a Web site. Forty-five percent strongly agree that having and maintaining a Web site is worth the costs, and another 30 percent mildly agree. Almost two thirds strongly agree that their Web sites will be worth the costs within the next five years. We now examine some technical considerations, such as who designs the Web sites, what their content typically includes, who hosts the Web sites, how many people visit the Web sites, and how much it all costs.

Web Site Development

Businesses can create a Web site entirely on their own, they can hire someone else to do it, or they can do a combination of both. About 40 percent of Kentucky's Web businesses created and developed their own Web sites. Close to half left the Web site creation entirely to someone else, and the remaining 10 percent combined internal efforts with outside help. Businesses that did some or all of the development themselves used a combination of resources. About one third read a book, magazine article or some other publication about Web page development. The second most popular resource was the source code of other Web sites; many businesses talked to other people who have designed Web sites; and a little over one quarter of businesses used Web site development software such as *Fusion* or *FrontPage*.

FIGURE 36
Web Site Development Costs



Source: Survey of Small Business Owners with Sites on the World Wide Web, Kentucky Long-Term Policy Research Center, 1997

²⁵⁸ Jim Jordan, "Web Site Nets Big Break for Local Company," *Lexington Herald-Leader* 13 Dec. 1997: B1.

Firms that hired someone else to do some or all of the work most commonly used a friend, relative or other acquaintance. Word-of-mouth hiring is also very important. Less than 10 percent found someone to create their Web sites in a newspaper, magazine, or on the Web. The fee businesses paid for help in developing a Web site ranged from \$10 to \$40,000. One third of Kentucky's Web businesses paid \$1,000 or more for someone else to develop their Web site, and the median fee was \$600.

The content of the Web sites is pretty standard. Over 80 percent of Web sites have information about products and services, general information about the company, an e-mail address, and a street address or telephone number. Sixty percent of Web sites have product pictures, and 40 percent provide customer service or product support. Updates for the Web sites are not particularly frequent. Only 5 percent of businesses change their sites daily, and 15 percent change them weekly. More than half change their Web sites less than once a month or never. Firms that rely on someone else to update their Web sites generally have little trouble getting an update, and only about half of the businesses have to pay for an update.

By far the most popular means of advertising a Web site is to submit the site to search engines or directory services; two thirds of Web businesses do so. About one third of Web businesses have a link to their page on a regional Web site, such as those sponsored by a local Chamber of Commerce or a local development group. A far lower percentage of businesses participate in electronic shopping malls or send mailings (either electronic or traditional) to customers and potential customers. About 8 percent do nothing to promote their Web sites.

Annual visitors to Web sites range from a few dozen to hundreds of thousands. About 40 percent have more than 1,000 visitors per year, 20 percent have more than 10,000 visitors per year, and 6 percent have over 100,000 visitors per year. There is not a very strong relationship between size of company and number of hits: many small companies have tens or hundred of thousands of hits, while some large companies have fairly low numbers of hits.

Web Site Costs

Once a Web site has been created, the files need to be stored on a Web server. These machines are typically quite expensive, which explains why only about 20 percent of businesses have purchased a server. The median price paid for a Web server is \$3,800, and a handful of businesses reported paying more than \$20,000. The rest of the businesses pay another company to host their Web sites. The median monthly "rent" for a Web site is \$50 and the average is \$78.

Fifteen percent of Kentucky's Web businesses have hired additional staff to maintain their Web sites. There is a clear relationship between the number of hits on a Web site and whether a company has hired a new person to maintain it. Over 40 percent of firms getting 100,000 hits a year or more have hired someone to maintain the Web site, compared with only 5 percent of firms getting 1,000 hits or less.

Conclusion

The businesses we surveyed are generally satisfied with their Web sites. Most benefit from having a Web site and believe it is worth the costs or will be within a few years. Still, the Web may not be for everyone, at least not today. Businesses that provide only local services, such as plumbers or day care centers, and businesses that sell a fairly homogenous product, such as fast food restaurants, should ask themselves whether they are going to sell many hamburgers or repair many faucets in other states, let alone other countries. Nor is cost a trivial concern. Most businesses have invested a significant amount of time and money into their Web sites. With a median fee of \$600, Web site development by an outsider is not cheap. Even if a business develops a Web site entirely by itself, a typical Kentucky Web business pays hundreds of dollars a year in "rent" to have another company host its site on the Web. One more consideration is quality. As much as businesses emphasize the

importance of having a Web site to enhance market image, it is not enough to put anything on the Web just for the sake of having a presence. Going the cheapest possible route—asking your neighbor's kid to design your page and then buying stripped-down Web hosting services—may not help your business much if the quality, functionality, and accessibility of your Web site suffer.

None of this is meant to discourage businesses from putting a site on the Web; it is just a reminder that creating and maintaining a Web site is a business investment, just as hiring a new employee or renting more office space is, that has costs as well as benefits that must be weighed carefully.

Should location affect the decision to have a Web site? Probably not. Our survey results suggest that the costs and benefits of having a Web site are similar for all businesses, regardless of location. The only significant difference we found between rural and urban Web businesses is the kinds of products they sell, which simply reflects the fact that Kentucky's rural and urban economies differ. However, few rural businesses evidently are on the World Wide Web. We tried very hard to find Web businesses in eastern and south central Kentucky without much luck. This suggests that rural Kentucky is missing some big opportunities because the Web can help alleviate the spatial barriers that businesses far from large markets and major transportation routes face.

In the coming years, the Web will become increasingly useful, even necessary, for businesses. But we don't need to wait to see how it can help Kentucky's entrepreneurs. Small businesses, rural businesses, businesses selling an incredible variety of goods and services, have already told us that sales increase, market image improves, new customers are found, costs are reduced, and new employees are recruited because they have Web sites. "For a small business owner that normally may not have access to large organizations, the WWW is the answer!!!" wrote one company in response to our survey. "[The Web] draws interest from [the] northeastern United States in Kentucky crafts," wrote another. "I am finding that a number of our customers are checking on the Internet and educating themselves about our services before calling us," wrote a third. We received countless similar responses, but one business perhaps best illustrates the potential the Web holds for small entrepreneurs. A rural clothing manufacturer with fewer than five employees told us, "The Internet has allowed me to reach customers and make sales all over the world in less than three months. My customers have been so pleased that they have linked us to their sites, written manuals about us and passed out literature about our company . . . I could not have done this in years without the Internet." What we wrote in the introduction to this section is worth repeating: Perhaps the most important innovation for business in the 1990s is the World Wide Web.

A Rising Commitment to Microenterprises

While the high-growth firms or gazelles of the larger U.S. economy continue to dazzle the marketplace, they are rare, particularly rare in a largely rural state like Kentucky. Far more common but virtually invisible by comparison are what are now commonly referred to as “microenterprises,” tiny, often home-based businesses that usually employ no more than five people. Tiny though they are, the economic impact of microenterprises is dramatic. In 1995, the SBA estimates that microfirms employing between one and four people created 35 percent of the net new U.S. jobs, and firms with 5 to 19 employees created another 32 percent of new employment.²⁵⁹ Moreover, the Information Age economy has yielded example after example of exponential growth among what began as tiny businesses. Through an entrepreneurial approach to development, more of this energy can be captured in communities throughout the state, regardless of their size.

In addition to their job creation potential, microfirms are increasingly viewed as a viable antidote to poverty. International microenterprise development models have achieved remarkable success in alleviating poverty in the developing world by giving poor entrepreneurs fair access to credit. Building on international successes, the movement to enable the formation and development of microenterprises has gained significant ground in the United States. In an effort to help poor people seize entrepreneurial opportunities, a strong “bottom-up” strategy has emerged, largely in response to unsatisfactory economic development and anti-poverty efforts. The movement has gained a foothold “almost exclusively through the

In an effort to help poor people seize entrepreneurial opportunities, a strong “bottom-up” strategy has emerged, largely in response to unsatisfactory economic development and anti-poverty efforts.

efforts of independent grassroots organizations,” according to the Corporation for Enterprise Development.²⁶⁰ And, by a number of early assessments, it has proven its merit. Today, microenterprise development is being lauded and recognized by the President, incorporated into federal and state welfare reform initiatives, and adopted by a growing number of states and local governments as a strategy to increase personal income and respond to the employment demands of welfare reform.

Though relatively new to the United States, microenterprise development offers a timely response to the decentralization of employment patterns. Microenterprise development initiatives recognize the opportunities that changing employment patterns hold and assist would-be entrepreneurs in assessing and acquiring entrepreneurial skills and obtaining credit. Though microentrepreneurs are less visible in the United States than in countries where significant portions of the labor force are engaged in informal market economies, the dynamics of today’s economy are forcing *and* inspiring millions to adopt entrepreneurial roles. A small fraction of the enterprises they develop will become tomorrow’s growth firms, the stuff of the “born-in-a-barn”²⁶¹ and garage or dorm room legends behind some of today’s top computer and software producers.

While microentrepreneurs are becoming increasingly visible, many remain outside the formal economy. Kentucky’s indefatigable flea market vendors who buy and sell what others cast off are notable examples. Bringing these enterprising individuals into the formal economy is a key goal of many U.S. microenterprise initiatives. Other microentrepreneurs operate thriving, albeit tiny, above-board enterprises, a growing number of which fall in the personal services component of the economy, which includes, among other things, custodial services, child care and catering. Still others

²⁵⁹ USSBA, “Facts . . .”

²⁶⁰ William Schweke, Victoria Lyall, and Carl Rist, *Jobs By the Poor, For the Poor: Profiles of Community Innovation* (Washington: Corporation for Enterprise Development, 1996).

²⁶¹ For example, see Gateway Computers’ home page (available at <http://www/gw2k.com/corpinof/story/story.htm>).

design, make and sell crafts such as jewelry, furniture, quilts and pottery. In the agricultural services sector, lawn services and landscape gardening provide employment and income for a growing number of resourceful microentrepreneurs. Others market specialty foods, design software or new applications of technology, or act as management consultants.

Importantly, very small businesses can discover high-demand product niches and build highly successful enterprises. Kentucky's Cox Interiors serves as a noteworthy example. What began as a small family business operated by a father, son and daughter quickly grew into a major employer and contributor to the Kentucky economy. The senior Cox sank his life savings into a venture that converted abundant raw materials into high-quality wood products, in this case, the interior wood moldings, doors, mantels and stairways that lend grace to homes. Only 14 years from its modest beginnings, according to Lonnie Cox, the Campbellsville-based manufacturer employs 600 people and continues to grow at a rate of 15 percent per year.²⁶² Arguably, this home-grown firm is more deeply rooted in Kentucky soil than branch plants and thus far less likely to relocate operations in pursuit of cheaper labor, as Fruit of the Loom has chosen to do.

On a far smaller scale but one that illustrates the potential of microenterprise development as an antidote for poverty and as a welfare reform strategy for those with entrepreneurial capabilities, Gerianne Abney launched her own small-scale sewing business in Lexington in 1996 after 10 years of dependence on welfare. With personal guidance from the Community Action Council's self-sufficiency program and business development training and start-up funds from Community Ventures, a nonprofit economic development agency based in Lexington, Abney realized a long-time dream of business ownership. With a loan of just \$2,500, Abney launched IMA Sewing Shop on Reynolds Road. At the same time, she enlisted as a mentor with Community Ventures, inspiring others to believe in their own possibilities. "There is no reason why, if a person wants to start their own business, they can't do it," observed Abney. "All it takes is some training and some encouragement."²⁶³

Out of the Third World

The model for microenterprise development emerged not from one of the world's dominant capitalist nations, but from one of its poorest. Founded by economist Muhammad Yunus in the mid-1970s, the Grameen (Village) Bank has been making loans for more than two decades to some of the poorest people in the world, Bangladeshi women who do not own land. The idea for the bank emerged when Professor Yunus and his students conducted field studies of the informal economies of local villages. They found that a number of villagers needed only small sums of money to buy materials, work freely, and escape the usurious loan practices of traders who bought their wares.²⁶⁴

In lieu of collateral, Grameen requires borrowers to become part of peer-lending groups, to join a five-member group and a 40-member center, attend weekly meetings, and share joint responsibility for repayment of group loans. If one member of the group defaults, all lose access to credit. But few do. The women who comprise 94 percent of Grameen borrowers repay their loans at a 98 percent on-time rate,²⁶⁵ even though Grameen charges higher interest rates than commercial lenders and never forgives loans though it occasionally restructures them.²⁶⁶ Since 1993, Grameen has made 16 million tiny loans. During 1997 alone, it expected to loan half a billion dollars.²⁶⁷

²⁶² Lonnie Cox, Telephone Interview, May 1997.

²⁶³ Gerianne Abney, Telephone Interview, May 1997.

²⁶⁴ David Bornstein, "The barefoot bank with cheek," *Atlantic Monthly* Dec. 1995: 40.

²⁶⁵ Bornstein.

²⁶⁶ Bornstein.

²⁶⁷ "Summary Paper from the Grameen Support Group, Australia," online, Internet (available at: <http://tit soc.soc.titech.ac.ip/tit soc/higuchi-lab/icm/grameen-supportgrp.html>).

Importantly, an estimated one third of Grameen's borrowers had worked their way out of poverty by 1995. By the close of the century, Yunus predicts that the bank's 2 million 1995 customers will have freed themselves from poverty.²⁶⁸ Part of a movement that has been coined the first "Third World technology transfer," Grameen's success has spawned a worldwide network of microenterprise development organizations that is attempting to spread Yunus' model of "socially conscious capitalism."²⁶⁹ "If the United States becomes convinced that poverty can be eliminated," Yunus observes, "then it can be done."²⁷⁰

While the experiences of assisting very poor microentrepreneurs in developing countries may seem remote, poor people face similar disadvantage in the United States. Many have no credit histories or poor ones and little or no experience with banks. Because banks often require a minimum balance in checking accounts, a cushion that families living on fixed or very low incomes usually cannot afford, the customary foundation for a relationship with a bank is rarely formed. Predictably, traditional lending institutions tend to view the poor as credit risks and see little potential for return on small loans, given the cost of processing. And, as Marley and McKee observe, would-be entrepreneurs "who lack the skills to draft convincing business and financing plans often remain invisible to conventional lenders. Conversely, few loan officers are trained well enough to spot the winners among a crop of nontraditional borrowers."²⁷¹ As a consequence of the inaccessibility of credit and other asset-building vehicles, the very tools the poor need to enable workforce participation or enterprise development are often out of reach. Small lines of credit can enable would-be entrepreneurs to form small enterprises that supplement family income and, in some cases, provide a route to financial independence. For others, such credit helps finance transportation, child care, clothing and other necessities that enable successful workforce participation.

Microenterprise program development represents a reversal of past U.S. responses to poverty that imposed rigid asset, income and workforce participation criteria in exchange for cash, housing and food assistance. Many argue that the present approach has encouraged dependence, discouraged personal risk, and effectively prevented recipients from gaining needed economic leverage. Though self-employment will likely be an option for only a few, programs that promote microenterprise development are, as Solomon notes, markedly different from past approaches to public assistance in that they focus on "the capacities of the poor, not their deficiencies."²⁷² Additionally, suggest William W. Burrus and Katherine E. Stearns of the Tucson-based U.S. Division of ACCION International, microenterprise development numbers among the few economic development strategies that do not segregate and isolate the poor. Instead, a primary goal is to enable poor entrepreneurs to move into the economic mainstream.²⁷³

"If the United States becomes convinced that poverty can be eliminated, then it can be done."

Muhammad Yunus
Founder of the Grameen Bank

²⁶⁸ Emily MacFarquhar, "A banking lesson from Bangladesh," *U.S. News and World Report* 3 April 1995: 41.

²⁶⁹ Bornstein.

²⁷⁰ Bornstein.

²⁷¹ Deborah Markley with Katharine McKee, *Business Finance as a Tool for Development* (Washington: The Aspen Institute State Policy Program, 1992) xi-xii.

²⁷² Lewis D. Solomon, "Microenterprise: Human Reconstruction in America's Inner Cities," occasional paper for Progressive Policy Institute, Washington, DC, June 1991, online, Internet (at: www.dlcpi.org/text/social/microent.TXT).

²⁷³ William W. Burrus and Katherine E. Stearns, letter, *Inc. Online*, Internet, 24 June 1996 (available at: http://www.inc.com/beyondthemag/real_time/microloans.html).

The U.S. Response

While the prevailing view of economic development among states continues to be one of recruiting businesses and industries, international microlending programs have proven that bottom-up development works in some of the world's poorest countries. Additionally, economic development theorists have advocated internal capacity-building development strategies for many years. A growing number of states have launched initiatives aimed at expanding access to credit and business development assistance among the poor and guiding and assisting would-be entrepreneurs with the planning, management and financing of very small businesses. According to the Corporation for Enterprise Development, 19 states now dedicate funds to microenterprise development. But in spite of compelling findings about the early successes of U.S. initiatives as well as long-standing international ventures, state initiatives focus principally on the capitalization of loan funds, rather than on the development and maintenance of support programs,²⁷⁴ without which many believe these initiatives will not achieve their potential.

A growing number of states have launched initiatives aimed at expanding access to credit and business development assistance among the poor and guiding and assisting would-be entrepreneurs with the planning, management and financing of very small businesses.

These 19 states are channeling mostly federal funds into microenterprise development initiatives, but only Virginia and North Carolina have created specifically targeted appropriations for microenterprise development.²⁷⁵ Importantly, North Carolina's rural focus illus-

trates the viability of microenterprise development outside of urban environments. With oversight by an advisory board, a network of community-based organizations administers the North Carolina Rural Economic Development Center, Inc., a recipient of the inaugural 1996 Presidential Award for Excellence in Microenterprise. In addition to individual and group lending, the Center's affiliates provide access to peer support and coordinate training through community colleges and small business development centers. To enable asset accumulation, it also offers a savings program. Similarly, the relatively new Virginia Enterprise Initiative, which was initiated in 1995, provides two-year funding and technical support to 15 community-based microenterprise programs. Grants from the Initiative were made on a matching basis and issued as the result of a competitive request-for-grant-proposal process.

According to CFED, only nine states actually provide funding for program operations, and these issue largely from fragmented, narrowly targeted streams of federal funds.²⁷⁶ The SBA's Microloan Program, for example, provides funds for the majority of Kentucky microenterprise development initiatives. But many states have disdained federal dollars from other sources that could have been used for microenterprise development. Prior to 1995, according to Kentucky Department for Local Government (DLG) Branch Manager William C. Wolejsza and Government Advisor Bob Chandler, few states took advantage of funds for microenterprise development purposes from the Housing and Urban Development (HUD) Department due largely to burdensome regulatory requirements. When these requirements were eased, DLG used HUD funds from its Small Cities Program in 1996 to launch a pilot program in microenterprise development. DLG has opted to provide support for microenterprise programs, rather than capitalize loan funds. "The greatest need is not for cash, but to

²⁷⁴ CFED, *Building State Support for Microenterprise Development: Policy Options and the Role of Statewide Networks*. (Washington: Author, undated), 8.

²⁷⁵ CFED, *Building* 9.

²⁷⁶ CFED, *Building* 9-10.

make it loanable,” observed DLG Branch Manager William C. Wolejsza. “A number of communities that have active nonprofits want to be in on this.”

During the 1996 cycle of funds, DLG set aside \$250,000 to begin “dabbling” in microenterprise development and funded a program start-up by the city of Paducah, as well as efforts in Mercer and Madison counties and Bowling Green that used existent lending and support infrastructures. Though small, the pool of funds probably matched the capacity of communities in the state to respond, according to Wolejsza. Few had the infrastructure in place to meet the national objectives and provide matching funds. For the 1997 budget cycle, another \$250,000 pool of funds was dedicated to microenterprise development.

The Seeds of Microenterprise Development in Kentucky

A number of organizations in Kentucky have ventured into what is termed micro-lending, but few offer the very small loans that typify microenterprise development as practiced by international models like Grameen. While this may, in part, be due to the scale of the U.S. economy compared to that of developing nations, very small loans based principally on character, as opposed to more traditional, collateral-based, credit-worthy loans, appear to be largely unavailable in Kentucky. Part of the void results from a poorly developed infrastructure to support entrepreneurship in general and to provide credit to the poor. Indeed, the check cashing industry, which has garnered recent regulatory attention, has flourished because the poor generally have no access to formal credit. Consequently, the development and expansion of such asset accumulation vehicles as Individual Development Accounts is key.

Like many in the United States, Kentucky’s microenterprise development initiatives depend heavily upon federal funds. Four private, nonprofit groups in Kentucky utilize funds from the U.S. Small Business Administration’s Microloan Program, which is designed to provide loans ranging from less than \$100 to a maximum of \$25,000. To secure access to the SBA microlending funds, organizations must provide nonfederal matching funds in a loan loss reserve account equivalent to 15 percent of the loan amount.²⁷⁷ Borrowed funds can be used to buy machinery, equipment, furniture, inventory, and supplies or to provide working capital, but not to pay existing debts.²⁷⁸

While others are in the process of formation, the Aspen Institute’s *1996 Directory of U.S. Microenterprise Programs* lists only six initiatives in Kentucky. They are: Central Development Corporation in Louisville; Community Ventures Corporation in Lexington; Human/Economic Appalachian Development (HEAD) Corporation based in Berea; Kentucky Highlands Investment Corporation based in London; Jewish Family and Vocational Service in Louisville; and Women’s Initiatives Networking Groups (WINGS) based in Berea. Four of the efforts serve large geographic areas. As the following examples illustrate, programmatic approaches and experiences differ significantly.

Community Ventures Corporation. The Bluegrass Microenterprise Fund, a loan program of the Lexington-based Community Ventures Corporation, most closely resembles the Grameen model of peer group lending and support. According to Mark Koller, a commercial loan officer with Community Ventures, this nonprofit community economic development corporation recruits potential entrepreneurs through its business development classes held across a 17-county region, forms loan groups, and makes loans based on peer analysis. Borrowers can secure first-time loans for up to \$2,500, and given successful repayment, qualify for a second loan of up to \$5,000. While loans average in the \$2,000 to \$2,500 range, according to Koller, loans as small as \$500 have been made.

Like the highly successful Women’s Self Employment Project based in Chicago, a model for many U.S. micro-lending initiatives, the Bluegrass Microenterprise Fund is the product of a carefully cultivated relationship with area banks that make loans based on the recommendations of peer

²⁷⁷ USSBA, *Kentucky District Office Information Booklet* (Louisville) 1997: 15-16.

²⁷⁸ USSBA, *Kentucky District*. . . 16.

group analysis. Since the fund was created in the early 1990s, the fund has made between 80 to 100 loans averaging roughly \$2,000 each through participating banks. And, according to Koller, repayment rates have been excellent. The fund has enjoyed a 4 percent loss rate, which compares favorably to an average loss rate of between 1 percent and 2 percent for traditional, collateral-based, credit-worthy bank loans. "It's really good when you consider the market. These people could not get conventional financing," Koller noted.

The unconventional loans provided by participating banks through Community Ventures have helped launch and sustain a number of tiny, generally one-person, businesses in the Bluegrass area. They provide services such as residential and commercial lawn care and landscaping, sewing and alterations, tax preparation, catering, painting, and child care. Other microentrepreneurs have financed small specialty retail operations and restaurant supply businesses with loans from the fund.

Purchase Area Development District. When the Purchase Area Development District (ADD) secured \$200,000 in SBA microloan funds in 1994, the ADD sought to begin with a small effort to explore the market and avoid significant losses. According to Norma Drouin, an economic development specialist with the ADD who manages a portfolio of publicly financed loan funds, the loan funds were exhausted almost as soon as they arrived. While the ADD opted to tailor the SBA microloan funds to requests already

When the Purchase Area Development District secured \$200,000 in SBA microloan funds in 1994, they were exhausted almost as soon as they arrived.

in place with the agency, placing the loan minimum at \$2,000, the smallest loan made under the program was for \$10,000, compared to an average loan of between \$150,000 and \$175,000 across all funds managed by the agency. Bor-

rowers, however, were unconventional by traditional bank standards in that they were either new to the industry in which they hoped to start a business, lacked collateral, or had a blot on their credit histories.

In spite of the nontraditional pool of microentrepreneurs, none of the Purchase ADD's borrowers has defaulted or has become delinquent on payments. With guidance and financial support, the borrowers have launched such enterprises as small retail operations, a florist shop, a surveying business, and professional practices in veterinary medicine and rehabilitation therapy, and purchased equipment for existent businesses. Because continued funding for the demonstration loan program was uncertain, the ADD has been without microloan funds since its 1994 pool was exhausted soon after its arrival. In April 1997, however, it received SBA authorization to apply for an additional \$525,000 in microloan funds.

Kentucky Highlands Investment Corporation. According to Stephen Taylor, a financial analyst with Kentucky Highlands Investment Corporation, the London-based Small Business Investment Company hoped to move broadly into the microlending field when it became one of 35 recipients in the nation to receive SBA microloan funds. But Kentucky Highlands has not enjoyed the type of response to microlending that it had hoped for, probably as a consequence of its 12-county rural service area. Prospective microentrepreneurs are difficult to reach and develop.

First approved for \$750,000 in microloan funds, Kentucky Highlands had only tapped \$200,000 of its available funds by the end of the first two years of its program, according to Taylor. Kentucky Highlands loaned \$300,000 from its first fund and has since secured an additional \$700,000 for the loan fund, but response to the available capital has remained somewhat tepid, prompting extensive outreach. Of the 31 loans averaging almost \$14,000 each that Kentucky Highlands has made, 50 percent have gone to start-ups, while 32 percent have gone to existing businesses that have borrowed funds to maintain (32 percent) or expand (18 percent) operations.

For a variety of reasons, however, repayment rates have been somewhat discouraging. However, as the viable businesses in the group have developed, a range of small enterprises has emerged in the 12-county southeastern Kentucky region that Highlands serves. They include a boat manufac-

turer, a machine shop, a pet shop, a nonprofit rehabilitation workshop (the only eligible nonprofit borrower under SBA microloan guidelines), a cabinet maker, a discount furniture rental business, a rural dry goods store, an insurance company, a tombstone maker, a home incarceration service that provides equipment and monitors compliance, and a company that prints artwork on a range of promotional products.

In addition to restructuring the debts of borrowers, Kentucky Highlands is seeking to improve the program's success through more careful selection of borrowers and attempts to secure even unconventional collateral. Nevertheless, in its experiences, according to Taylor, Kentucky Highlands has found truth in what international microlenders consistently observe—character is ultimately the best predictor.

Women's Initiatives Networking Groups (WINGS). The brainchild of three women entrepreneurs who struggled to start their own businesses, this affiliate of MACED was formed in response to the void they perceived in efforts to nurture "or even acknowledge" the role women could play in the development of the Appalachian economy, according to Executive Director Jeannie Brewer. As expressed in its mission statement, WINGS strives "to foster self-employment opportunities for low- and moderate-income women in Appalachian Kentucky who are searching for alternatives to minimum wage, low satisfaction jobs or public assistance." While WINGS has an informal partnership with Appalbanc's community partnership fund, its primary focus, according to Brewer, is to provide entrepreneurial training, networking and mentoring opportunities. "We're trying to get people organized enough, thoughtful enough in their assessment of personal resources so when they go to a lending institution to borrow they are not putting themselves more at risk."

The brainchild of three women entrepreneurs who struggled to start their own businesses, WINGS was formed in response to the void they perceived in efforts to nurture "or even acknowledge" the role women could play in the development of the Appalachian economy.

Working in seven Appalachian target areas, WINGS is a mobile program that concentrates on a target area for six months. Specifically, WINGS provides training in three phases:

- (1) a 12-week entrepreneurial training class, including a four-week personal life assessment designed to evaluate a woman's potential for self-employment, followed by practical business training, including marketing, bookkeeping, and legal and tax issues;
- (2) monthly networking meetings that enable group problem solving and provide some continuing education; and,
- (3) individual development through consultation and business mentoring.

WINGS, which is funded by a combination of government, foundation and private contributions, now has 55 people active in its network. Nearly 70 women have been involved in the program to some extent. Brewer estimates that between 15 percent and 20 percent of WINGS clients receive some type of government assistance. Presently, the organization is working with 20 businesses, many of which are home-based, that are in some form of organizing activity. Still others are in the development phase, conducting research that will facilitate the launch of a microenterprise or discourage its development.

Conclusion

While knowledgeable observers caution that microenterprise development, like any economic development strategy, is not a panacea and not a likely path for those who have been completely isolated from the economic mainstream, it offers a viable path for many, including some welfare recipients. In a five-year, five-state study, the Self-Employment Investment Demonstration (SEID), the Corporation for Enterprise Development found that a significant number of welfare recipients could successfully start and operate businesses. From evaluations of SEID, CFED found that a relatively small percentage of welfare recipients, between 1 percent and 5 percent of caseloads, opted to start their own businesses. Given Kentucky's June 1997 caseload, such percentages could yield between 490 and 2,500 new microentrepreneurs, some of whom would create additional jobs. CFED found that those recipients who did opt to launch businesses made measurable gains toward financial independence and asset accumulation:

- 79 percent of businesses were still operating after an average of 2.6 years;
- 25 percent of businesses created jobs in addition to those of the owners;
- business owners accumulated an average of \$4,867 in net business assets and nearly \$9,000 in gross personal assets;
- primary reliance on AFDC declined from 78 percent of owners to 27 percent.²⁷⁹

Similarly, the Self-Employment Learning Project (SELP) of the Aspen Institute, in conjunction with Abt Associates, conducted an in-depth survey of 405 microentrepreneurs from seven development programs around the country. The study, which included some recipients of welfare, found that 62 percent of microentrepreneurs who were poor in the first year of the study had increased their incomes three years later. Half saw their incomes rise by more than 75 percent, and another 23 percent increased their incomes enough to move out of poverty. As the Aspen Institute's Peggy Clark observes, "Compared to the broad array of public and private efforts that attempt to move the poor out of poverty, microenterprise programs perform exceptionally well; very few other programs enjoy results that yield a full quarter of participants who move out of poverty after three years."²⁸⁰

A 1994 study by the Institute for Women's Policy Research (IWPR) that combined national sample survey data with in-depth interviews and focus groups concluded that self-employment *alone* is not a route to self-sufficiency for most poor women.²⁸¹ Instead, the study found self-employment or microentrepreneurship was typically part of a package of income sources for welfare recipients that included wage and salary earnings, income from other family members, and welfare benefits. The authors of the study also concluded that this "packaging" of income from various sources is necessitated by low wages and by inadequate profits from self-employment.²⁸² Ironically, even the successes among those studied by IWPR experienced increased vulnerability. The more successful their businesses became, the greater the likelihood they lost health insurance,²⁸³ a circumstance that is expected to become far more commonplace as former recipients move into jobs that offer no benefits.

In spite of the limitations of microentrepreneurship, the IWPR study's authors concluded that self-employment "can contribute to the economic well-being of low-income families and can also

²⁷⁹ Robert Friedman, Brian Grossman, and Puchka Sahay, *Building Assets: Self Employment for Welfare Recipients—Overview of the Findings from the Self-Employment Investment Demonstration* (Washington: Corporation for Enterprise Development, 1991).

²⁸⁰ Peggy Clark, letter, *Inc.* online, Internet, 24 June 1996 (available at: http://inc.com/beyondthemag/real_time/microloans.html).

²⁸¹ Roberta Spalter-Roth, Enrique Soto, and Lily Zandnaipour with Jill Braunstein, *Micro-Enterprise and Women: The Viability of Self-Employment as a Strategy for Alleviating Poverty* (Washington: Institute for Women's Policy Research, 1994) 33.

²⁸² Spalter-Roth et al. 27.

²⁸³ Spalter-Roth et al. 34.

help them escape from poverty.”²⁸⁴ Indeed, some recipients who reported working more hours for lower earnings as entrepreneurs expressed high levels of satisfaction with their work.²⁸⁵ Clearly, concerted attention to structural deficiencies, such as the inaccessibility of affordable health care and child care, will be critical to the challenge of enabling economic independence among former welfare recipients and among the growing ranks of marginalized workers regardless of whether they pursue entrepreneurial routes.

New Possibilities

Propelled by the expanding web of world communications, the ideas and ideals of visionaries such as Grameen founder Muhammad Yunus, who sincerely believes that poverty can be eliminated, are exerting a profound and unprecedented influence on public policy. As a consequence of the rapid dissemination of information, we are not only readily adopting goals that stretch our current capabilities, we are also quickly amassing the knowledge to achieve many of them. Just as entrepreneurs are discovering new enterprises that create jobs and wealth, policymakers are being challenged to use today’s information rich context to expand opportunity for citizens. To do so, as Drucker suggests, we must see, understand and seize the promise of change. Certainly a part of that promise lies in the possibilities that entrepreneurs bring to an economy and a society.

²⁸⁴ Spalter-Roth et al. 33.

²⁸⁵ Spalter-Roth et al. 39.

Strategies for Change

No single player holds the key to an entrepreneurial Kentucky—not state or local government, not the business community, not the banks or the schools or even the state's ordinary citizens; rather, all of them do.

Rob Gurwitt, The Aspen Institute

A recent report on the proceedings of a 1996 conference held at Shakertown in Harrodsburg observes that the cultivation of an entrepreneurial culture in Kentucky will require a “disorderly process,” one of action on virtually every level by all major institutions and with the involvement of individuals across the Commonwealth. In its recent study of entrepreneurship in Appalachia, the Mountain Association for Community Development (MACED) concurred, “No one party can be responsible for creating a supportive entrepreneurial climate in a community. Widespread involvement is crucial.” Indeed, neither legislation nor alterations of public policy will infuse the state with much-needed entrepreneurial energy. Instead, the pursuit of entrepreneurship will be a long-range process, one that aims, first and foremost, to engender a new culture, new perspectives on our communities as places of possibility rather than insoluble economic dilemmas, and new images of ourselves as a people who possess the power to transform their communities and, ultimately, the entire Commonwealth. In short, what is needed is a comprehensive effort, one that is strongly supported at the highest levels of government by all its institutions and broadly advanced at the local level.

Already, community leaders across the Commonwealth are focusing on more entrepreneurial approaches to growing local economies, on alternatives to the “build-and-they-will-come” strategy of investment in industrial parks. Others have acted to fill capital voids in their communities by forming locally based microenterprise development funds that are enabling entrepreneurs who do not have access to traditional capital. In other venues, nonprofit organizations, from some local Chambers of Commerce to MACED, are promoting development strategies that embrace small business and microenterprise development. At Hazard Community College, students have access to a discipline in entrepreneurship, one that aims to cultivate the skills needed for business development and expansion. At the University of Louisville, a nationally recognized program of entrepreneurship studies is emerging. However, more, much more, is needed.

Fortunately, a remarkable convergence of thinking on how to advance entrepreneurship and grow Kentucky's wealth of small enterprises has emerged. While specific recommendations vary, reports from the Kentucky Appalachian Commission's Entrepreneurship Issue Team, the Kentucky Science and Technology Council, and MACED share common conclusions. Our findings

The homegrown businesses that spring from entrepreneurial pursuits are not likely to move from the locale where they were established; they are built on the dynamics of the community—its heritage and culture, the talents and attributes of the people and their capacity to participate in economic processes, the natural resources of the community and the opportunities they support.

here support many of these conclusions and, at the same time, suggest the need for discussion and exploration in subject areas beyond the purview of this study.²⁸⁶

Additionally, our exploration of entrepreneurship in Kentucky suggests, as our research often does, that our “institutional intelligence”²⁸⁷ needs to be strengthened. Rather than wait for the federal government to design a methodology for the collection and analysis of data, we could begin now to analyze in new ways the employment and wage data we routinely collect. Patterns of self-employment as well as employment and wage trends by size of firm will become increasingly important to our understanding of the economy.

In short, much remains to be done. And many individuals and institutions must become involved if we are to fully realize the potential of the abundance of talent and energy in Kentucky.

Nurture and Cultivate an Entrepreneurial Culture

When leaders suggest in public forums, as they often do, that a solution to underemployment and poverty in rural areas of the Commonwealth is to encourage relocation to our urban areas, they do this essentially rural state a disservice. While many inevitably move toward opportunities in urban centers, many more have the desire and the capability to build prosperous enterprises in rural communities where jobs and opportunity are needed. But they need encouragement and public support, rather than admonitions for remaining attached to people and place. We

cannot expect a generation of entrepreneurs to emerge and build a strong rural economy, an outcome that would benefit urban as well as rural areas, if it constantly hears that achieving prosperity means leaving home. This message of defeat needs to be replaced with one of possibilities and potential. Like the Kentucky Science and Technology Council and MACED, we conclude that vigorous efforts are needed to teach entrepreneurial thinking *and* to change public perceptions.

To do so, we must broaden understanding of the trends in our larger economy and their implications for the future of the Commonwealth. This report and those that have preceded it help make the case for responding to those trends by placing a far stronger emphasis on entrepreneurship in Kentucky. But Kentuckians need to hear from their elected representatives at every level, from community leaders, from teachers and from all those who influence public perceptions, that building a good life does not necessarily require leaving this state or any region of it. More Kentuckians must come to believe and understand that opportunity can be created in their communities. It does not

How do we teach entrepreneurial thinking?

The Kentucky Science and Technology Council is seeking answers to this central question. With a grant from BellSouth and support from the Louisville-based Cralle Foundation, a project team is now exploring ways of creating a tool kit of strategies, programs or materials that schools can use to help create a more entrepreneurial environment.

Integral to the success of the effort, says project director Joanne Lang, will be helping teachers understand that they are entrepreneurs who have the flexibility to create interesting and exciting learning opportunities. By promoting creative, out-of-the box thinking among educators, the project team hopes to help create opportunities for children to experience entrepreneurial thinking, rather than simply be exposed to lesson plans about entrepreneurship.

A request for proposals has been issued for two schools to develop transferable materials or exercises in school environments.

²⁸⁶ For example, the commercial application of academic research products in Kentucky should be fully explored and any lingering obstacles should be removed as soon as possible.

²⁸⁷ R. Scott Fosler, “State Economic Policy: The Emerging Paradigm,” *Economic Development Quarterly* Feb. 1992: 10.

necessarily lie in the hands of someone, somewhere else.

As we report here, the importance of fostering a generation of entrepreneurs who will serve as role models for subsequent generations cannot be overstated. We must move rapidly to integrate

Marketing Education

A program in Secondary Vocational Education, Marketing Education teaches entrepreneurial concepts and functions through many of its courses. The program encourages students to consider both the importance of our free enterprise system and the advantages of private ownership. Students may operate school-based enterprises such as a school store, an advertising agency, a grocery store, or a school bank.

Distributive Education Clubs of America (DECA), a national student organization, holds many events that allow and encourage students to showcase their entrepreneurial skills. Events include student or team preparation of business plans or role playing with industry representatives to solve business problems or respond to market situations.

images and lessons of entrepreneurship into the curricula of elementary and secondary schools and make it a strong career track in our institutions of postsecondary education. As the Aspen Institute report recommends, our vocational and technical schools should build training in entrepreneurial skills into curricula, to enable more Kentuckians to master the marketplace, as well as the skills it demands.²⁸⁸ In our postsecondary schools, the University of Louisville is setting the standard for entrepreneurial education, one that should be emulated statewide. On every front, we need to showcase the experiences of successful Kentucky entrepreneurs as examples and teach young and old of the possibilities as well as the practicalities of business ownership.

Part of the educational process is the need to expand institutional understanding and forge new traditions. From elected leaders to economic development profes-

sionals, from banks to social service agencies, broader understanding of entrepreneurship can open new possibilities. Clearly, as MACED has recommended, economic development professionals need tools to tap the entrepreneurial capacity of the communities they serve. With ready access to new skills, information and resources, these professionals and others can form new organizational alliances and partnerships.

When more alliances like that forged between Lexington's Community Ventures Corporation and area banks emerge, the banking community, for example, can enable more low-income and poor Kentuckians to realize their dreams of entrepreneurship. Likewise, an increased understanding of high-technology and knowledge firms among loan officers would permit banks to make more informed decisions and, in many cases, enable the creation and development of thriving Kentucky firms. Social service providers who are equipped with the tools to aid would-be entrepreneurs can recognize opportunity where there appeared to be none.

The path toward an economy based on locally owned small business is unclear, even to those who want to be on it. This obstacle can be turned into an opportunity if community leaders and economic development professionals are given the tools to formulate a blueprint for communities that want to diversify their economic development efforts.

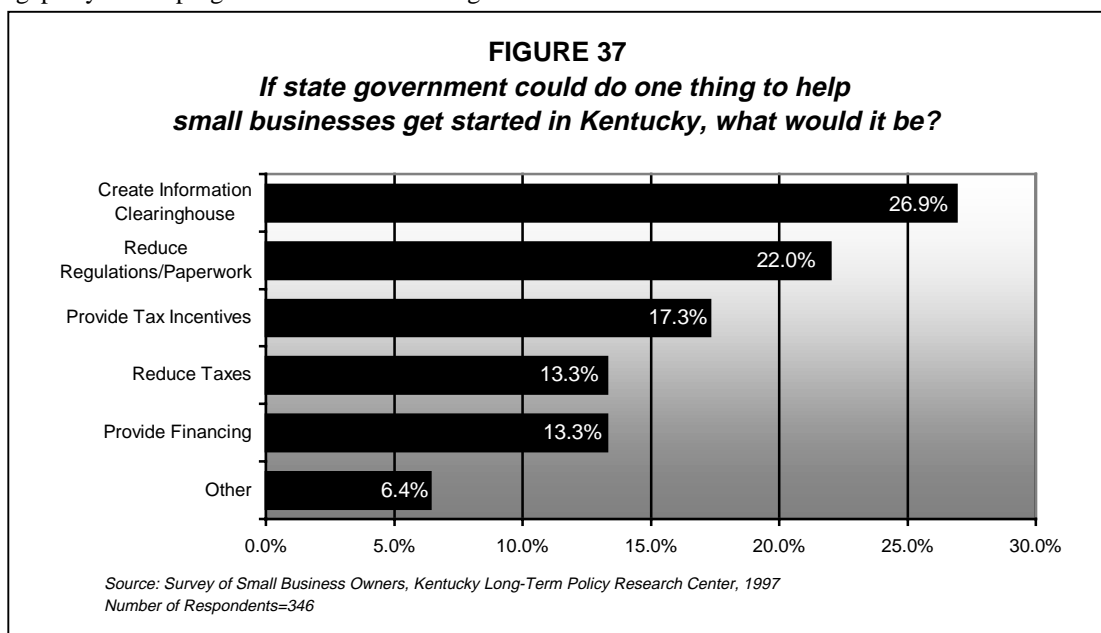
MACED

²⁸⁸ Rob Gurwitt, *Developing Entrepreneurial Economies in Rural Regions: Lessons from Kentucky and Appalachia* (Washington: The Aspen Institute, 1998) 21.

Part of the educational process will, as the Kentucky Science and Technology Council has suggested, require more entrepreneurs to step forward and assume roles of leadership, to use the bully pulpit to argue for a new perspective and the resources needed to match the challenge it poses. Ultimately, a more balanced approach to economic development at every level, one that places equal emphasis on our internal capabilities, rather than our dependence on external decisions, will be required to marshal public support for entrepreneurship and unleash the considerable capacity within our state.

Strengthen Support for Entrepreneurs and Small Business

From our survey of small business owners in Kentucky, we learned that few are aware of many small business services in the state and those who are aware of them do not rate them highly. Overall, only 14 percent of these respondents rated small business assistance services in the Commonwealth as “good” while 44 percent rated them as “fair” and 42 percent said they are “poor.” We also asked small business owners in Kentucky what state government could do to help entrepreneurs get started here. The largest percentage of responses referred to the need to address information gaps by developing an information clearinghouse.



In some cases, most notably capital, our findings, as well as those of the Kentucky Appalachian Commission, Kentucky Science and Technology Council, and MACED, suggest that information about resources, rather than resources, is in short supply. As illustrated in Figure 37, small business owners confirm the relatively low level of importance that is attached to financing relative to information. If a need exists, it is for better marketing of the services available to assist entrepreneurs rather than for capital to finance new and existing ventures.

The findings of our survey of Kentucky bankers also suggest a need for expanded technical assistance to help more would-be entrepreneurs become viable candidates for traditional financing. As illustrated in Figure 38, most bankers reported that recent applications for start-ups are of lower or

the same quality as those they received five years ago. Only 23.6 percent of respondents find current applications to be of higher quality than those received five years earlier. Though the lack of collateral plays a significant role here, were sufficient, adequately marketed technical assistance available, we would expect more bankers to rate current applications as higher in quality than those received five years earlier.

To accurately gauge our programmatic capacity, a comprehensive assessment of the reach and the effectiveness of small business services throughout the state should be conducted. The work of the Kentucky Appalachian Commission has resulted in an important foundation for such an assessment. Many would-be entrepreneurs in the state may not have access to technical assistance that could help improve their “fitness for funding”²⁸⁹ or help their businesses become more profitable. Conversely, they may simply be unaware of services that are available to them due to the lack of or the ineffectiveness of marketing strategies or insufficient budget allocations for marketing. The Kentucky Appalachian

Commission concludes that more single points of access and advice about what programs are best suited to the entrepreneur’s needs should be made available to eliminate the present “fragmentation” of programs.

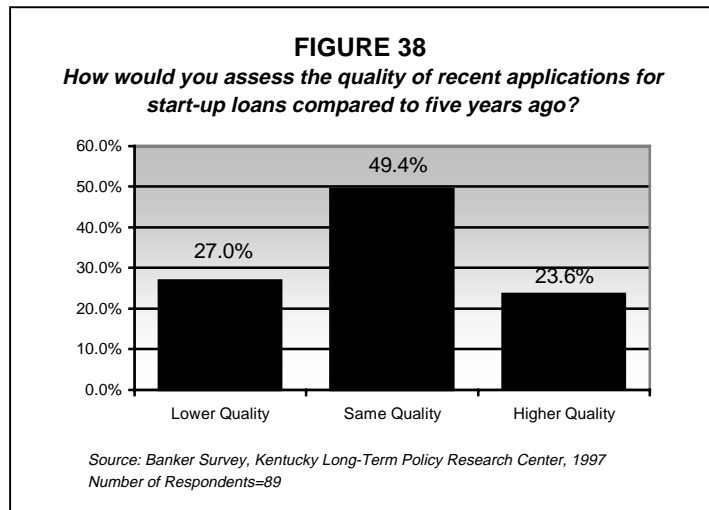
**Making services
available is futile
unless they are
widely used.**

The Aspen Institute

In any case, we must identify service delivery gaps and assess the performance of existent services before we invest in new services. If expansion is necessary, and our findings here suggest this is a strong likelihood, the state should explore ways of effectively partnering with other service providers or provide grants to private nonprofit providers. Clearly, effective marketing of these services is key to the success of any system of technical assistance and it should be a strong component of any budget.

An accessible, interactive web site that provides comprehensive information about how to start a business in Kentucky, where to get technical assistance, financing, employees, real estate, etc., must become a high priority. MACED’s plans to create a virtual entrepreneurship center offer a model, an electronic gathering place where entrepreneurs can collect information they need and interact with advisors who can guide them. On-line applications and key links to public entities such as the Small Business Administration and Small Business Development Centers should be carefully constructed. The network of entrepreneurs that both KSTC and MACED envision could also become linked to the site. Such a site or sites must have a statewide rather than a regional orientation, however. If state government is unwilling to assume responsibility for establishing and maintaining such a web site or virtual entrepreneurship center, state funds could be made available to organizations like MACED that are prepared to address what is clearly an unmet need.

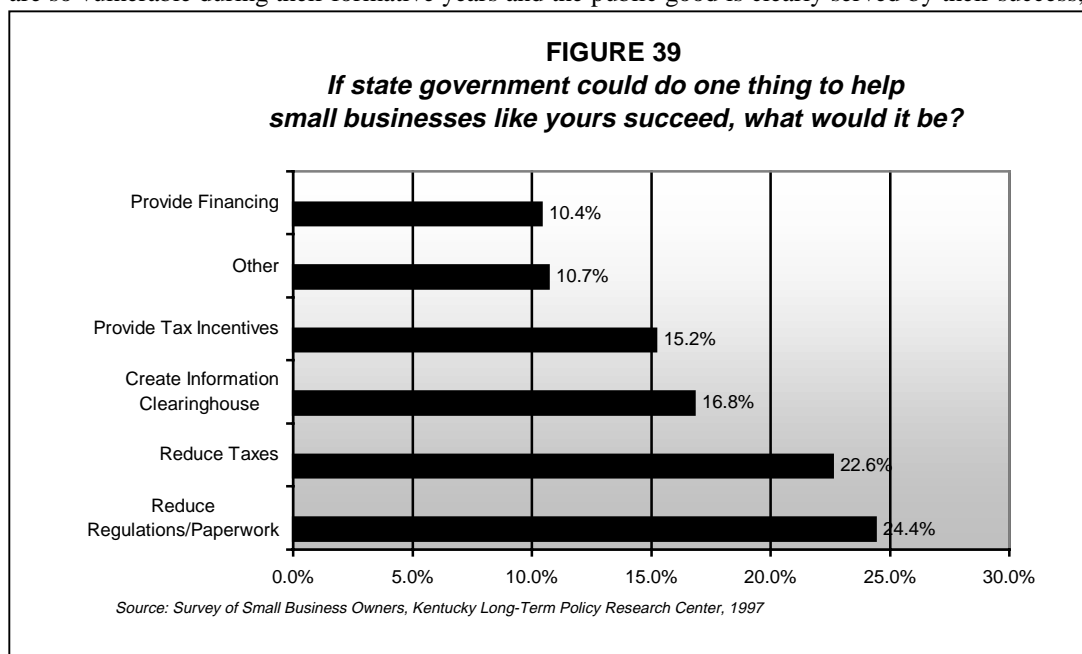
As shown in Figure 39, small business owners were also asked what state government could do to help firms like theirs succeed. Here, the discomfort business owners express with the burden of paperwork and regulations may point to an area where remedies are needed. Undue burdens on



²⁸⁹ Gurwitt 18.

small enterprises that lack the resources to dedicate staff or hire experts exact costs on struggling firms and discourage many microentrepreneurs from formal entry into the economy. In either case, the public good is not served. While state government can do little to address the regulatory demands of federal laws, it can provide ready access to information that will assist small business owners who must navigate these regulations and make its own regulatory demands as user friendly and, KSTC suggests, as seamless as possible. One-stop services that are available online would be the ideal.

Likewise, many small business owners view tax burdens as excessive. This perennial complaint, however, is not borne out by research, namely that of KPMG Peat Marwick, which found that Kentucky has a competitive corporate tax structure.²⁹⁰ However, the need to facilitate the development and growth of small firms may point to an area where adjustments are in order. Because start-ups are so vulnerable during their formative years and the public good is clearly served by their success,



policymakers may want to explore ways of providing tax reductions or deferrals during these crucial developmental years. As with all incentives to business, we recommend that they be strategically designed to realize the maximum public good, i.e., reserved for those small firms that create high-value jobs, establish high-technology anchors, or help correct market weaknesses such as unemployment, undereducation, etc.

While our discussion here centers on entrepreneurial potential, we cannot forget the extraordinary wealth that small firms already bring to this state. Every effort should be made to enhance the contribution these firms make to our economy, to strengthen their competitive capacity and, thus, expand their contribution to the wealth of this state. Programs and initiatives that can strengthen Kentucky's small businesses include:

- The Kentucky Technology Service, which assists small firms throughout the state in the application of technology;
- Export development assistance to help small firms move beyond local markets;
- Formal network development to unite small firms with common interests and needs;

²⁹⁰ Barents Group LLC, *Comparative Analysis of Kentucky's Tax Structure* (Washington: KPMG Peat Marwick Co., July 1995).

- Informal support network development to provide advice and counseling to entrepreneurs;
- Effectively marketed information about sources of capital, technical assistance, marketing, product research, the availability and skill of workers, training and other resources, etc.;
- Small business incubators that help nascent businesses get on their feet;
- Access to training in state-of-the-art business development strategies such as the World Wide Web as a business tool, web site development, and electronic data interchange;
- Development of pools of small businesses that give these employers access to more affordable health insurance rates and other important employee benefit plans;
- The cultivation of local development initiatives that understand the importance of entrepreneurship and small business development.

In every case, these are not programs or initiatives that any community in Kentucky should wait for state government to deliver. Instead, entrepreneurial efforts to build a more enlightened approach to development must gather energy and commitment at the local level. Further, efforts to assist entrepreneurs can be successfully developed and advanced at the local level. Indeed, the fundamentals of rural development offer tools for fostering entrepreneurship, including: leadership development efforts focused on engaging community entrepreneurs; partnerships that unite diverse institutions and organizations in common initiatives; regional cooperation that maximizes assets, extends the reach of initiatives, and permits stronger collaborative efforts to leverage public and private resources; and a commitment to planning for the long term.

"Any community can start learning to value its entrepreneurs. A community can become the driver of this as easily as the public sector or the private sector."

Janet Topolsky
The Aspen Institute

Focus Efforts at the Local Level

Like politics, economic development is local. And no element of development is more local than the cultivation and nurturance of small firms. We join the Kentucky Appalachian Commission, KSTC and MACED in recommending that all services and any new resources allocated to finance gaps in our provider network be localized. While state government has a legitimate and important role to play in the advancement of entrepreneurship, our centralized efforts to assist small firms should be focused on research, information, technical assistance, training for local developers and providers, and grants to facilitate activity at the local level.

Exploit the Vast Potential of the Internet

Two things are evident from our research: (1) small business owners in Kentucky are not using the Internet to the extent they could, and (2) neither is state government. As a consequence, most of Kentucky's small businesses are missing out on the vast marketplace to which the Internet is a gateway, one that will expand dramatically as security issues are resolved. We also find that small business owners have, at best, a very low awareness of public programs to support small business. In short, too few of the people these resources were designed to serve are even aware of

their existence. To date, no state government web site offers timely, comprehensive information to small business owners or would-be entrepreneurs. While the Cabinet for Economic Development has produced an extraordinarily useful resource guide entitled "Kentucky Enterprise" in the past, one that is again ready for publication, years have lapsed between updates and publication, state funds have not been allocated for its publication, and no apparent mechanism exists for continual updating. Were the information in this resource guide posted on the World Wide Web, it could be routinely updated with relative ease.

In addition to exploiting the power of technology to close information gaps, public entities can help encourage web site development by tracking its impact on commerce in the state, creating a grants program that will enable local organizations to establish a presence on the World Wide Web, training more entrepreneurs to develop web sites, and further loosening the reins on coal severance dollars to include local web site development initiatives. Tapping the power of the Internet can offer some local communities enormous development potential. Certainly, relatively isolated, rural regions of the state that have not benefited from traditional recruitment may find a wealth of opportunity on the World Wide Web.

Build Assets

Given the context in which we are challenged to fuel entrepreneurial growth, one of our most significant obstacles is insufficient wealth. Bankers tell us that collateral is their most important loan criteria, one that often cannot be met by prospective candidates for loans. Even some nontraditional lenders now expect would-be entrepreneurs to provide some form of collateral, to risk something of their own in the business venture they propose. In a state with comparatively low incomes and a high rate of poverty, the pool of individuals who can bring sufficient collateral to the

"Income may feed people's stomachs, but assets change their heads. When you have a little bit of savings, it buffers you from the everyday accidents and illnesses that otherwise become crises. As those savings grow, it encourages you to think about a future better than the present—to plan for and prepare for it. . . . it's directly connected to entrepreneurship, to having a place to stand and the ability to invest in yourself and your kids."

Robert Friedman
Corporation for Enterprise Development

loan process is necessarily circumscribed. Consequently, our constant challenge, that of increasing wealth, particularly among low-income Kentuckians, is central to the entrepreneurial equation.

Here again, a strong programmatic response at the local level is needed to address the need for access to credit among the poor and to help low-income Kentuckians increase assets through such vehicles as Individual Development Accounts. While the public resources required to enable asset building are minimal, the benefits could prove to be exponential. Through grants to local organizations or financial institutions that can construct and manage IDAs and extend small lines of credit, we can provide

the empowering tools of self-sufficiency to those who most need them. We can plant the seeds of possibility in places where, for many, the hope of opportunity appears remote and unattainable. By responding to a clear need, we can also address the root cause of the troubling proliferation of businesses that charge exorbitant interest rates on small, short-term loans made almost exclusively to the poor.

Address Inequities

The findings of a recent Governor's Commission suggest that the same gaps in opportunity and participation that are present in so many arenas are also evident in business ownership. Indeed, the pace of growth in minority and women business owners in Kentucky lags behind the nation, and few programs exist to address this imbalance. A recent study found that obstacles to financing for female minority-owned firms, in particular, are formidable roadblocks that must be addressed.²⁹¹ Through broader investment in programs such as MACED's WINGS, concerted efforts to ensure equal opportunity lending and the creation and support of alternative lending sources, Kentucky can begin to address the inequities that frustrate access to opportunity and prosperity.

Conclusion

The public sector has much to learn from successful entrepreneurs. In all of its many and varied forms, it can achieve greater public good by becoming more entrepreneurial in its approaches to public service. To do so, public agencies and organizations must know the environment, establish a dialogue with those whom they serve, fit products to citizen-customer needs, relentlessly pursue improvements in the quality of services, and be prepared and willing to innovate and change. The external environment most assuredly will. In short, an entrepreneurial spirit throughout the public sector will be needed to breathe life and energy into the latent entrepreneurial potential of the Commonwealth.

²⁹¹ Maggie Jackson, "Minority Women Face Money Bias," *Lexington Herald-Leader* 28 April 1998: B-1.

Conclusion

The larger economic context in which businesses must compete and workers must strive to gain an economic foothold has changed dramatically. Competition is fierce and global in its reach. The more successful, more competitive firms have fundamentally altered the way they work to achieve greater efficiency, productivity and quality. The effects of these changes have been profound. In millions of workplaces around the nation, fewer people do more work of a higher quality. Patterns of employment have become far less centralized, as the nation's firms and governments have become purposefully smaller. While traditional employment is less certain today, the economy is exploding with entrepreneurial opportunities for those with ideas, innovations, and the drive to find a place for them in the world marketplace that hums around us. Small, sometimes tiny, one-person, enterprises are seizing the business opportunities being scattered into the marketplace. A select few are growing at a rapid pace, reminding us that every business, even the world's monolithic corporations, were once small firms struggling to succeed.

The future happening all around us compels attention to the development of timely, responsive public policy. The challenge of expanding opportunity has grown far more complicated, even as the resources and information available to us have expanded. Development is no longer simply a matter of creating jobs, of recruiting "value-added" industries that will employ citizens of the Commonwealth. Indeed, what the larger economy now values is no longer easily defined. Information and the tools that enable its production, manipulation and dissemination now dominate our economy, hardly the "goods" of the recent past. While it remains a cornerstone in our economy, manufacturing is no longer a certain path to high-value jobs and enduring economic strength; productivity leaps and global competition for cheap labor virtually assure declining employment in this sector. In short, the circumstances that enable development have changed. In turn, public policy must respond and be prepared to continue responding thoughtfully and nimbly if it is to answer the challenge of creating opportunity for citizens of the Commonwealth.

Today's development challenge demands that we shift our focus from the mobile industries we have assumed will be the salvation of local economies to the cultivation of entrepreneurial capacity and business development within the Commonwealth. As Peter K. Eisinger and others have argued, "demand-side" policies that focus on local resources as a basis for growth can help diminish counterproductive interstate competition and facilitate capital formation and the creation of wealth. An entrepreneurial development approach represents a significant reversal of past policies, movement away from the widely held notion that opportunity and prosperity lie in the hands of someone somewhere else. It demands that we focus more, much more of our energies and our resources on the considerable strengths that lie within our state, as we have with education reform. In doing so, we can build on an already remarkably diverse economy that is dominated and driven by small firms.

A more entrepreneurial approach to economic development offers many potential benefits to the Commonwealth. Small firms, research shows, are not only creating the majority of jobs in today's dynamic economy, they are also creating the best jobs, jobs of value that contribute to the well-being of families and the wealth of communities. Further, by focusing on our capacity for development within the state, we can invest our economic development strategies with far greater equity, creating opportunity in places where it is most needed rather than in places where mobile

industries are most likely to locate. Further, an entrepreneurial approach to development that is echoed in the language of public policy and in the approaches to development that we adopt is likely to become an important catalyst for innovation in many other arenas.

Unlike mobile firms, small businesses are an integral part of the life of communities, linked to people and places they are far less likely to leave than firms whose fates are orchestrated from distant locations. Moreover, they generally possess sufficient flexibility to weather larger economic storms and to adapt to changing market conditions more readily than large firms. Some researchers conclude that small businesses are an indispensable element of vibrant, growing communities. Indeed, many of the enormous difficulties posed by the challenge of rural development can be overcome through the deliberate cultivation of entrepreneurial capacity and the development of small businesses at the local level. By strengthening our infrastructure of support for entrepreneurship and small business development, we can help more small firms succeed and more small communities thrive.

Many have argued that the entrepreneurial energy emanating from Kentucky is, at best, anemic. Indeed, our resource-rich state suffers from a shortage of the very raw materials that are believed to foster entrepreneurship. The enduring legacy of undereducation, a lack of diversity in our population, and an inadequate store of management talent adversely affect our ability to generate and sustain new enterprises. Moreover, we find that Kentucky entrepreneurs have little familiarity with a variety of state and federal programs designed to assist them. Those who are familiar with these services usually find them less than satisfactory, suggesting that our infrastructure of public support for entrepreneurial development is, at best, weak and, at worst, ineffective. Among small business owners, government is viewed as more of a hindrance than a help in development. Therefore, public response to the mix of raw materials we bring to entrepreneurship may not be sufficient to counter circumstances that inhibit business development.

In spite of the inadequacy of the raw materials Kentucky brings to the entrepreneurial process, we find outcomes indicative of far more strength than many are willing to attribute to our state. Indeed, Kentucky may have significant latent entrepreneurial energy. The traditional aggregate measures used to assess Kentucky's capacity for business development belie the very different circumstances in which many Kentucky entrepreneurs live and work. Because our state is far more rural than virtually every state with which it is routinely compared, the Commonwealth does not fare well in analyses that focus exclusively on aggregate data. Many indicators of entrepreneurship, we find, are biased in favor of more urbanized states. When we control for our state's "ruralness," we find that data typically used to depict Kentucky's anemic entrepreneurial capacity reveal a different picture. While not an altogether rosy one, it is one of surprising strength given the limitations of our entrepreneurial raw materials and the dilution of resources that result from the rural nature of our state. To tap and increase our store of entrepreneurial capacity, further investment in programs that cultivate, train and guide entrepreneurs and business owners are needed.

What we may not need is more capital. Indeed, we find that, contrary to widely expressed concerns, sufficient traditional and venture capital may be readily available to qualified Kentucky entrepreneurs. For the very small percentage of entrepreneurs who seek venture capital, we find that readily accessible venture capital firms located in surrounding states are willing and eager to invest in Kentucky firms, so long as they possess the requisite strengths that virtually every lender expects—a good idea backed by some collateral, a solid business plan and a competent management team. Indeed, as our depleted entrepreneurial resource base suggests, our problem, if we have one, is not one of too little capital to finance entrepreneurial ideas. Instead, venture capitalists and bankers concur, we have too few entrepreneurs who are genuinely ready to launch businesses.

In order to grow established small firms in our state as well as enable emerging ones, we also must cultivate vision beyond our borders. Externally oriented export firms that see and tap more of the potential of the marketplace that lies beyond their immediate environs are not only more likely to grow and succeed, they are more likely to pay higher wages. Consequently, the low utilization of

the Internet that we find among small business owners may be constraining business growth and development. The public good to be realized from increased use of the Internet for market research, advertising, sales, purchases, recruitment and training, we believe, is clear.

As we look to the future, a range of trends will influence business formation and development in the Commonwealth. Here, the aging of our population and the movement of more retirees to rural destinations in Kentucky will create distinct new markets and new business opportunities. Moreover, we can expect more older citizens to venture into business ownership as they remain vigorous and active for a longer time and seek income to supplement retirement provisions. Everywhere, globalization and information technology will continue to influence the economy, stimulating competition while creating opportunity. How quickly and effectively appropriate members of our business community utilize the Internet may exert a strong influence on the future of our economy.

On the capital front, bank consolidation will continue to change the character of banking and perhaps the role that these institutions play in financing small firms. While many see a future of diminished capital from these traditional institutions as once well-established relationships are lost in corporate acquisitions, others predict an era of increased professionalization and innovation in banking practices, spurred by competition. Our findings suggest that the latter is the more likely scenario. Certainly, Kentucky's largest banks manage most of the volume of small business loans. And the once-conservative market for small business lending has changed. Already, some banks are aggressively competing for small business loans. Moreover, a recent national survey finds that more small firm owners report borrowing from banks than in past years, though many are unhappy with changes in their banking community.

In years to come, as we contend with the fallout from welfare reform, the smallest of small firms—microenterprises—are likely to garner increased attention and public investment, as new labor force entrants seek opportunities at the edge of our economy. Lessons in microenterprise development from the poorest nations of the world are already informing our approaches to cultivating and capitalizing would-be entrepreneurs who historically have been excluded from the economic mainstream. By broadening access to credit and to programs that nurture entrepreneurial skills and by enabling the accumulation of assets, we can adopt a far more empowering response to poverty than in the past.

Because small firms, some of which began as sole proprietorships or microenterprises, are creating high-quality jobs and, in many cases, experiencing exponential growth, we need no longer look to the outside world for the possibility of generating wealth in Kentucky. Instead, we need to capture more of the spirit of enterprise within the people of this state and their communities and to examine the effectiveness of our response to small businesses and would-be entrepreneurs. Our research suggests that we are doing too little to cultivate entrepreneurial talent and enable business development. As some of the most dynamic economies in the world have demonstrated, we can build a far more innovative and entrepreneurial culture, one that responds to the needs of people and firms and that creates wealth and opportunity.

In doing so, we will discover and make possible new opportunities in unexpected places across the Commonwealth. Perhaps more important, we will begin changing the mindset that has imprinted upon generations of Kentuckians the belief that they must leave their home state in order to prosper. Through the development of a far more entrepreneurial economy, we can transform the Commonwealth from a place that citizens return to in their retirement years after they have accumulated wealth in another place to a place where people can build wealth, whether they are young or old. And we can begin to counter the misguided notion that the best hope for rural Kentucky is the migration of its unemployed and underemployed to urban areas with temporary labor shortages. While our highly mobile labor force will continue to adapt to economic circumstances as needed, the public suggestion that abandonment is a solution to rural economic shortcomings runs counter to the larger, widely shared goal of retaining more young people and

more of the state's best and brightest. Beyond our already strong urban triangle, rural as well as urban areas across the Commonwealth hold enormous potential for small business development by people who consciously choose the quality of life small towns offer. Through policies and practices that enable entrepreneurship and small business development, we can help more of these individuals create and spread wealth. We can capture more of the enterprise within us.